November 13, 2002

RE: United States Gypsum Company 089-11767-00333

TO: Interested Parties / Applicant

FROM: Paul Dubenetzky

Chief, Permits Branch Office of Air Quality

### **Notice of Decision: Approval - Effective Immediately**

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this permit modification is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, within (18) eighteen days of the mailing of this notice. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) the date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for consideration at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

(over)

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of a Title V operating permit or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impractible to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency Administrator, Christine Todd Whitman 401 M Street Washington, D.C. 20406

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosure FNTVPMOD.wpd 8/21/02

November 13, 2002

Mr. Michael P. Spihlman United States Gypsum Company 301 Riley Road East Chicago, IN 46312

Re: 089-11767

First Significant Permit Modification to

Part 70 No.: T 089-7532-00333

Dear Mr. Sphilman:

United States Gypsum Company was issued a permit on July 6, 1999 for a stationary gypsum wallboard and gypsum products manufacturing plant. A letter requesting changes to this permit was received on January 13, 2000. Pursuant to the provisions of 326 IAC 2-7-12(d), a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

The proposed change is for the elimination of the stack testing requirement for the waste reclaim shredder, and to correct errors in the stack designations, throughput and capacities of various production facilities. Natural gas throughput limits from CP-089-8657-00333, issued on January 8, 1998, which were inadvertently left out of the original Part 70 permit, have also been added.

All other conditions of the permit shall remain unchanged and in effect. A new revised Part 70 Operating Permit is provided for final issuance.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Patrick Brennan, c/o OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, at 631-691-3395 or in Indiana at 1-800-451-6027 (ext 631-691-3395).

Sincerely,

Original signed by Paul Dubenetzky

Paul Dubenetzky, Chief Permits Branch Office of Air Quality

Attachments PTB/MES

cc: File - Lake County

U.S. EPA, Region V

Lake County Health Department

Air Compliance Section Inspector - Richard Massoels

Compliance Branch - Karen Nowak

Administrative and Development - Cynthia Bymaster Technical Support and Modeling - Michelle Boner



### Indiana Department of Environmental Management

We make Indiana a cleaner, healthier place to live.

Frank O'Bannon Governor

Lori F. Kaplan Commissioner 100 North Senate Avenue P. O. Box 6015 Indianapolis, Indiana 46206-6015 (317) 232-8603 (800) 451-6027 www.IN.gov/idem

# PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

### United States Gypsum Company 301 Riley Road East Chicago, Indiana 46312

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T089-7532-00333	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: July 6, 1999 Expiration Date: July 6, 2004

First Significant Permit Modification No.: SPM 089-11767-00333	Sections Affected: A.2, A.3, B.9, B.11, D.1, D.2, D.3, D.4, D.5, D.6, D.7, D.8
Original signed by Paul Dubenetzky Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: November 13, 2002

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#### SECTION A

### SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary gypsum wallboard and gypsum products manufacturing plant.

Responsible Official: Jay L. King, Plant Manager

Source Address: 301 Riley Road, East Chicago, Indiana 46312 Mailing Address: 301 Riley Road, East Chicago, Indiana 46312

SIC Code: 3275 County Location: Lake

County Status: Nonattainment for ozone, PM<sub>10</sub> and SO<sub>2</sub>

Attainment area for all other criteria pollutants

Source Status: Part 70 Permit Program

Major Source, under PSD and Emission Offset Rules;

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

Raw material handling and storage, consisting of the following equipment:

- (a) One (1) pneumatic rail car unloading facility, with a maximum throughput of 24,000 pounds per hour, used for limestone, hydrocal, and mica, with particulate matter emissions controlled by each individual baghouse identified as JBH-11, JBH-12 and JBH-13, and exhausting through each respective stack identified as J-11, J-12 and J-13 respectively.
- (b) One (1) pneumatic truck unloading facility, with a maximum throughput of 22,000 pounds per hour, used for perlite, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-16, and exhausting through one (1) stack, identified as J-16.
- (c) One (1) limestone storage silo, with a maximum capacity of 330 tons, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-11, and exhausting through one (1) stack, identified as J-11.
- (d) One (1) hydrocal storage silo, with a maximum capacity of 140 tons, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-12, and exhausting through one (1) stack, identified as J-12.
- (e) One (1) mica storage silo, with a maximum capacity of 60 tons, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-13, and exhausting through one (1) stack, identified as J-13.
- (f) One (1) perlite storage silo, with a maximum capacity of 250 tons, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-16, and exhausting through one (1) stack, identified as J-16.

- (g) One (1) enclosed rock shed, with a maximum capacity of 125,000 tons.
- (h) One (1) synthetic gypsum stockpile, identified as F-1, with particulate matter emissions exhausting directly to the atmosphere.

A landplaster production process, consisting of the following equipment:

- (a) A conveying system, consisting of belt and screw conveyors, with particulate matter emissions controlled by partial or total enclosure, and exhausting to associated processes or directly to the atmosphere. Some portions of the conveyor system are controlled by one (1) baghouse, identified as MBH-2, and exhausting through one (1) stack, identified as M-2.
- (b) One (1) dryer mill bin #1, with a maximum capacity of 60 tons and a throughput of 40 tons per hour, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.
- (c) One (1) dryer mill bin #2, with a maximum capacity of 60 tons and a throughput of 40 tons per hour, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.
- (d) One (1) dryer mill #1, with a maximum throughput of 35 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-8, and exhausting through one (1) stack, identified as M-8.
- (e) One (1) natural gas-fired burner for the dryer mill #1, with a heat input capacity of 20 MMBtu per hour, and exhausting through one (1) stack, identified as M-8.
- (f) One (1) screening station #1, with a maximum throughput of 35 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-8, and exhausting through one (1) stack, identified as M-8.
- (g) One (1) dryer mill #2, with a maximum throughput of 35 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-12, and exhausting through one (1) stack, identified as M-12.
- (h) One (1) natural gas-fired burner for the dryer mill #2, with a heat input capacity of 20 MMBtu per hour, and exhausting through one (1) stack, identified as M-12.
- (i) One (1) screening station #2, with a maximum throughput of 35 tons per hour, with particulate matter emissions controlled by one (1) baghouse identified as MBH-12, and exhausting through one (1) stack, identified as M-12.
- (j) One (1) mill landplaster bin, with a maximum capacity of 20 tons, with particulate matter controlled by one (1) baghouse, identified as MBH-19, and exhausting through one stack, identified as M-19.

A stucco production process, consisting of the following equipment:

- (a) One (1) kettle feed bin #2, with a maximum capacity of 60 tons, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-8, and exhausting through one (1) stack, identified as M-8.
- (b) One (1) calcining kettle #2, with a maximum throughput of 45 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-16, and

exhausting through one (1) stack, identified as M-16.

- (c) Six (6) natural-gas fired burners for the calcining kettle #2, each with a heat input capacity of 5 MMBtu per hour, and exhausting through one (1) stack, identified as M-14.
- (d) One (1) kettle feed bin #3, with a maximum capacity of 60 tons, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-8, and exhausting through one (1) stack, identified as M-8.
- (e) One (1) calcining kettle #3, with a maximum throughput of 30 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-1, and exhausting through one (1) stack, identified as M-1.
- (f) One (1) natural-gas fired burner for the calcining kettle #3, with a heat input capacity of 15 MMBtu per hour, and exhausting through one (1) stack, identified as M-6.
- (g) One (1) hot pit #3, with a maximum throughput of 30 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-1, and exhausting through one (1) stack, identified as M-1.
- (h) A conveying system, with a maximum throughput of 70 tons per hour, with particulate matter emissions controlled by partial or total enclosure, and exhausting to associated processes or directly to the atmosphere. Some portions of the conveyor system are controlled by one (1) baghouse, identified as MBH-2, and exhausting through one (1) stack, identified as M-2.
- (i) One (1) stucco storage bin, with a maximum capacity of 50 tons, with particulate matter controlled by one (1) baghouse, identified as MBH-2, and exhausting through one (1) stack, identified as M-2.

A gypsum wallboard manufacturing line, consisting of the following equipment:

- (a) One (1) stucco storage bin, with a maximum capacity of 1200 tons, with particulate matter controlled by one (1) bin vent, identified as BBH-11, and exhausting through one (1) stack, identified as B-11.
- (b) One (1) stucco surge bin with hopper, with a maximum capacity of 2 tons, with particulate matter controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
- (c) One (1) (HRA) landplaster feed bin, with a maximum capacity of 20 tons, with particulate matter emissions controlled by one (1) bin vent, identified as BBH-12, and exhausting inside the building through one (1) stack, identified as B-12.
- (d) One (1) HRA mill additive bin (sugar), with a maximum capacity of 10 cubic feet, feeding the HRA ball mill, with particulate matter emissions uncontrolled, and exhausting inside the building.
- (e) One (1) HRA ball mill, with a maximum throughput of 2400 pounds per hour, with particulate matter controlled by one (1) baghouse, identified as BBH-18, and exhausting inside the building through one (1) stack, identified as B-18.
- (f) One (1) HRA bin, with a maximum capacity of 3 tons, with particulate matter controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.

- (g) One (1) additive refill bin (starch), with a maximum capacity of 3 tons, with particulate matter controlled by one (1) baghouse, identified as BBH-16, and exhausting inside the building through one (1) stack, identified as B-16.
- (h) One (1) additive refill receiver (vermiculite), controlled by one (1) vacuum receiver, identified as BVH-17, and exhausting inside the building through one (1) stack, identified as B-17.
- (i) Two (2) additive bulk storage bins (starch and vermiculite), each with a maximum capacity of 75 tons, with particulate matter emissions controlled by two (2) separate baghouses, identified as BBH-14 (starch) and BBH-15 (vermiculite), and all exhausting to two (2) respective stacks, identified as B-14 and B-15.
- (j) One (1) additive surge bin (vermiculite), with a maximum capacity of 5 tons, with particulate matter controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
- (k) One (1) glass fiber additive bin, with a maximum capacity of six (6) cubic feet, with particulate matter emissions uncontrolled, and exhausting inside the building.
- (I) One (1) paper fiber mill with cyclone separator, with a maximum throughput of 900 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
- (m) One (1) mixing screw conveyor, with a maximum throughput of 60 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
- (n) One (1) natural gas-fired gauging water heater, with a heat input capacity of 3.5 MMBtu per hour, and exhausting through one (1) stack, identified as B-19.
- (o) One (1) wet mixer, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
- (p) One (1) wet zone kiln natural gas-fired burner, with a heat input capacity of 67 MMBtu per hour, and exhausting through one (1) stack, identified as B-20.
- (q) One (1) dry zone kiln natural gas-fired burner, with a heat input capacity of 67 MMBtu per hour, and exhausting through one (1) stack, identified as B-20.
- (r) One (1) wet end seal natural gas-fired burner, with a heat input capacity of 2.5 MMBtu per hour, and exhausting through one (1) stack, identified as B-20.
- (s) One (1) dry end seal natural gas-fired burner, with a heat input capacity of 2.5 MMBtu per hour, and exhausting through one (1) stack, identified as B-20.
- (t) One (1) wallboard drying kiln, with a maximum throughput of 78,000 square feet of wallboard per hour, and exhausting through one (1) main stack, identified as B-20.
- (u) One (1) end saw, with a maximum throughput of 78,000 square feet of wallboard per hour, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-25, and exhausting through one (1) stack, identified as B-25.
- (v) One (1) waste reclaim shredder, with a maximum throughput of 50 tons per hour, with particulate matter controlled by two (2) baghouses, identified as WRBH-1 and WRBH-2,

and exhausting through two (2) stacks, identified as WR-1 and WR-2, respectively.

(w) One (1) existing cut-back saw, with particulate matter controlled by one (1) baghouse, identified as BBH-25, and exhausting through one (1) stack, identified as B-25.

A joint treatment process, consisting of the following equipment:

- (a) A pneumatic conveying system from the bulk storage silos to the scale hoppers, with particulate matter emissions controlled by three (3) baghouses, identified as JBH-11, JBH-12 and JBH-13, and exhausting through three (3) stacks, identified as J-11, J-12 and J-13, respectively.
- (b) Four (4) scale hoppers, with particulate matter emissions uncontrolled, and exhausting inside the building.
- (c) A ready-mix line, consisting of the following equipment:
  - (1) Two (2) holding hoppers, each with a maximum throughput of 5 tons per hour, with particulate matter emissions controlled by two (2) baghouses, identified as JBH-1 and JBH-2, and each exhausting through two (2) stacks, identified as J-1 and J-2, respectively.
  - (2) One (1) dry additives bag dump, with a maximum throughput of 1176 pounds per hour, with particulate matter controlled by three (3) baghouses, identified as JBH-1, JBH-2 and JVH-3, and exhausting through three (3) stacks, identified as J-1, J-2 and J-3, respectively.
  - (3) Two (2) wet mixers, each with a maximum throughput of 7.25 tons per hour, and exhausting inside the building.
- (d) A dry joint compound line, consisting of the following equipment:
  - (1) One (1) dry additives bag dump, with a maximum throughput of 600 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JVH-8, and exhausting through one (1) stack, identified as J-8.
  - One (1) reclaim screw conveyor, with a maximum throughput of 1,184 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-7, and exhausting through one (1) stack, identified as J-7.
  - (3) One (1) dry joint mixer, with a maximum throughput of 5,678 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-7, and exhausting through one (1) stack, identified as J-7.
  - (4) One (1) packing machine, with a maximum throughput of 5,100 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-14, and exhausting inside the building through stack J-14.
- (e) A dry texture paint line, consisting of the following equipment:
  - (1) One (1) dry additives bag dump, with a maximum throughput of 390 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-5, and exhausting through one (1) stack, identified as J-5.

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- (2) One (1) reclaim screw conveyor, with maximum throughput of 502 pounds per hour, and a polystyrene screw conveyor, with a maximum capacity of 75 pounds per hour, with particulate matter emissions controlled by one (1) baghouse. identified as JBH-4, and exhausting through one (1) stack, identified as J-4.
- (3)One (1) dry texture paint mixer, with a maximum throughput of 4650 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-4, and exhausting through one (1) stack, identified as J-4.
- One (1) packing machine, with a maximum throughput of 4650 pounds per hour, (4) with particulate matter emissions controlled by one (1) baghouse, identified as JBH-4, and exhausting through one (1) stack, identified as J-4.
- (5) One (1) dry paint weigh station, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-15, and exhausting through one (1) stack, identified as J-15.
- (6)One (1) dry additive conveying system, with a maximum throughput of 400 pounds per hour, with particulate emissions controlled by one (1) vacuum receiver, identified as JVH-6, and exhausting through one (1) stack, identified as J-6.

#### Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] A.3 [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (c) One (1) landplaster baler, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.
- (d) A polypropylene bag grinding process, consisting of the following equipment:
  - (1) A bag storage and conveying system, with two (2) bins and two (2) screw conveyors, with negligible emissions, and exhausting inside the building.
  - (2) Two (2) polypropylene bags grinding machines, each with a maximum throughput of 20 pounds per hour, with particulate matter emissions controlled by partial enclosure, and exhausted to the ground polypropylene bins.
  - (3)Three (3) ground polypropylene bins with screens, with a combined maximum capacity of 360 cubic feet, with particulate matter emissions uncontrolled, and exhausting inside the building.
  - (4) One (1) weigh feeder, with a maximum throughput of 47 pounds per hour, with particulate matter emissions uncontrolled, and exhausting inside the building.

#### Part 70 Permit Applicability [326 IAC 2-7-2] A.4

United States Gypsum Company East Chicago, Indiana Permit Reviewer: Bryan Sheets First Significant Permit Modification No. 089-11767 Permit Reviewer: Patrick Brennan/MES

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- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 Applicability).

### **SECTION B**

### **GENERAL CONDITIONS**

### B.1 Permit No Defense [326 IAC 2-1-10] [IC 13]

- (a) Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7.
- (b) This prohibition shall not apply to alleged violations of applicable requirements for which the Commissioner has granted a permit shield in accordance with 326 IAC 2-1-3.2 or 326 IAC 2-7-15, as set out in this permit in the Section B condition entitled "Permit Shield."

### B.2 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

### B.3 Permit Term [326 IAC 2-7-5(2)]

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

### B.4 Enforceability [326 IAC 2-7-7(a)]

- (a) All terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM.
- (b) Unless otherwise stated, terms and conditions of this permit, including any provisions to limit the source's potential to emit, are enforceable by the United States Environmental Protection Agency (U.S. EPA) and citizens under the Clean Air Act.
- (c) All terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by.

### B.5 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

### B.6 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

### B.7 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

### B.8 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.
- (c) Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAQ, along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAQ, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, then the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

### B.9 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
  - Enforcement action;
  - (2) Permit termination, revocation and reissuance, or modification; or
  - (3) Denial of a permit renewal application.
- (b) Noncompliance with any provisions of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act.
- (c) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (d) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

### B.10 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]

- (a) Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this permit, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

### B.11 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was continuous or intermittent;
  - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
  - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

# B.12 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each facility:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ.

### B.13 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
  - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance

Section), or

Telephone Number: 317-233-5674 (ask for Compliance Section)

Facsimile Number: 317-233-5967

(5) For each emergency lasting one (1) hour or more, the Permittee submitted notice, either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
  - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
    - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

### B.14 Permit Shield [326 IAC 2-7-15]

- (a) This condition provides a permit shield as addressed in 326 IAC 2-7-15.
- (b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements

as of the date of permit issuance, provided that:

- (1) The applicable requirements are included and specifically identified in this permit; or
- (2) The permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable.
- (c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application.
- (e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
  - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
  - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
  - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
  - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

### B.15 Multiple Exceedances [326 IAC 2-7-5(1)(E)]

Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

### B.16 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

within ten (10) calendar days from the date of the discovery of the deviation.

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
  - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
  - (2) An emergency as defined in 326 IAC 2-7-1(12); or
  - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
  - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.
- B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]
  - (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)]
  - (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:
    - (1) That this permit contains a material mistake.
    - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
    - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
  - (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

### B.18 Permit Renewal [326 IAC 2-7-4]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
  - (1) A timely renewal application is one that is:
    - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
    - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due. [326 IAC 2-5-3]
  - (2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3] If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as being needed to process the application.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)] If IDEM, OAQ, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

### B.19 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

# B.20 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

### B.21 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-7-20(b)]

The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a) and the following additional conditions:

- (a) For each such change, the required written notification shall include a brief description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.
- (b) The permit shield, described in 326 IAC 2-7-15, shall not apply to any change made under 326 IAC 2-7-20(b).

### B.22 Operational Flexibility [326 IAC 2-7-20]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
  - (1) The changes are not modifications under any provision of Title I of the Clean Air Act:
  - (2) Any approval required by 326 IAC 2-1 has been obtained;
  - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

- (b) For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
  - (1) A brief description of the change within the source;
  - (2) The date on which the change will occur;
  - (3) Any change in emissions; and
  - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]

  The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]

  The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

### B.23 Construction Permit Requirement [326 IAC 2]

Except as allowed by Indiana P.L. 130-1996 Section 12, as amended by P.L. 244-1997, modification, construction, or reconstruction shall be approved as required by and in accordance with 326 IAC 2.

### B.24 Inspection and Entry [326 IAC 2-7-6(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements. [326 IAC 2-7-6(6)]
  - (1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAQ, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAQ, nor an authorized representative, may disclose the information unless and until IDEM, OAQ, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]
  - (2) The Permittee and IDEM, OAQ, acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

# B.25 Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-7-11] Pursuant to 326 IAC 2-1-6 and 326 IAC 2-7-11:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the Permittee and the new owner.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-7-11. The notification which shall be

submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) IDEM, OAQ, shall reserve the right to issue a new permit.

### B.26 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

### **SECTION C**

### **SOURCE OPERATION CONDITIONS**

**Entire Source** 

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

### C.1 Major Source

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 and 326 IAC 2-3 (Emission Offset), this source is a major source.

C.2 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

### C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period, as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute overlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

### C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

### C.5 Incineration [326 IAC 4-2][326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

### C.6 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

### C.7 Operation of Equipment [326 IAC 2-7-6(6)]

All air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

### C.8 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

### C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management Asbestos Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) Procedures for Asbestos Emission Control
  The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4 and
  40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory for
  any removal or disturbance of RACM greater than three (3) linear feet on pipes or three
  (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all
  facility components.
- (f) Indiana Accredited Asbestos Inspector
  The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator,
  prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to
  thoroughly inspect the affected portion of the facility for the presence of asbestos. The
  requirement that the inspector be accredited is federally enforceable.

### Testing Requirements [326 IAC 2-7-6(1)]

### C.10 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

### Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

### C.11 Compliance Schedule [326 IAC 2-7-6(3)]

The Permittee:

- (a) Has certified that all facilities at this source are in compliance with all applicable requirements; and
- (b) Has submitted a statement that the Permittee will continue to comply with such requirements; and
- (c) Will comply with such applicable requirements that become effective during the term of this permit.

### C.12 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend compliance schedule an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

### C.13 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

### C.14 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

### C.15 Pressure Gauge Specifications

Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

### Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

### C.16 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

within ninety (90) days after the date of issuance of this permit.

The ERP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

### C.17 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present in a process in more than the threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

- (a) Submit:
  - (1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
  - (2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and
  - (3) A verification to IDEM, OAQ, that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.
- (b) Provide annual certification to IDEM, OAQ, that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- C.18 Compliance Monitoring Plan Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]
  - (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
    - (1) This condition;
    - (2) The Compliance Determination Requirements in Section D of this permit;
    - (3) The Compliance Monitoring Requirements in Section D of this permit;
    - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
    - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
      - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to

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- the requirements of Section D of this permit; and
- (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
  - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
  - (3) An automatic measurement was taken when the process was not operating; or
  - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- C.19 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]
  - (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAQ shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAQ within thirty (30) days of receipt of the notice of deficiency. IDEM, OAQ reserves the authority to use enforcement activities to resolve noncompliant stack tests.
  - (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

### Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- C.20 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]
  - (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
    - (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
    - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
  - (b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management Technical Support and Modeling Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- C.21 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]
  - (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
  - (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
  - (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
  - (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
  - (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

(f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

### C.22 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;
  - (4) The analytic techniques or methods used;
  - (5) The results of such analyses; and
  - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this permit;
  - (2) All original strip chart recordings for continuous monitoring instrumentation;
  - (3) All calibration and maintenance records;
  - (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C Compliance Monitoring Plan Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

### C.23 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Semi-Annual Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported.

- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:
  - Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any semi-annual report shall be submitted within thirty (30) days of the end of the reporting period.
- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

### **Stratospheric Ozone Protection**

### C.24 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

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#### **SECTION D.1**

#### **FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]

Raw material handling and storage, consisting of the following equipment:

- (a) One (1) pneumatic rail car unloading facility, with a maximum throughput of 24,000 pounds per hour, used for limestone, hydrocal, and mica, with particulate matter emissions controlled by each individual baghouse identified as JBH-11, JBH-12 and JBH-13, and exhausting through each respective stack identified as J-11, J-12 and J-13 respectively.
- (b) One (1) pneumatic truck unloading facility, with a maximum throughput of 22,000 pounds per hour, used for perlite, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-16, and exhausting through one (1) stack, identified as J-16.
- (c) One (1) limestone storage silo, with a maximum capacity of 330 tons, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-11, and exhausting through one (1) stack, identified as J-11.
- (d) One (1) hydrocal storage silo, with a maximum capacity of 140 tons, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-12, and exhausting through one (1) stack, identified as J-12.
- (e) One (1) mica storage silo, with a maximum capacity of 60 tons, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-13, and exhausting through one (1) stack, identified as J-13.
- (f) One (1) perlite storage silo, with a maximum capacity of 250 tons, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-16, and exhausting through one (1) stack, identified as J-16.
- (g) One (1) enclosed rock shed, with a maximum capacity of 125,000 tons.
- (h) One (1) synthetic gypsum stockpile, identified as F-1, with particulate matter emissions exhausting directly to the atmosphere.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

# Emission Limitations and Standards [326 IAC 2-7-5(1)]

# D.1.1 Nonattainment Area Particulate Limitation [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations), the PM emissions from the truck unloading facility exhausting to stack J16 and from the transfer vacuum receiver each shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).

#### D.1.2 Lake County PM<sub>10</sub> Emission Requirements [326 IAC 6-1-10.1]

Pursuant to 326 IAC 6-1-10.1 (Lake County  $PM_{10}$  Emission Requirements), the  $PM_{10}$  emissions from the storage and conveying facilities exhausting to stacks J11, J12 and J13 shall each not exceed 0.015 grains per dry standard cubic foot and 0.190 pounds per hour.

# D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

# **Compliance Determination Requirements**

#### D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM and PM<sub>10</sub> limits specified in Conditions D.1.1 and D.1.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

# D.1.5 Particulate Matter (PM)

Pursuant to OP-45-07-93-0520, issued on December 19, 1989, the baghouses for PM control shall be in operation at all times when the associated raw material handling and storage facility is in operation.

# Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.1.6 Visible Emissions Notations

- (a) Visible emission notations of the stack exhausts J11, J12, J13 and J16 shall be performed once per shift during normal daylight operations when the associated facilities are in operation and exhausting directly to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

#### D.1.7 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the raw material handling and storage facilities, at least once per shift when the associated raw material handling and storage facility is in operation when venting directly to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of 0.5 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

#### D.1.8 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the raw material handling and storage facilities. All defective bags shall be replaced.

# D.1.9 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

# Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

# D.1.10 Record Keeping Requirements

- (a) To document compliance with Condition D.1.6, the Permittee shall maintain records of visible emission notations of the baghouse stack exhausts J11, J12, J13 and J16 once per shift.
- (b) To document compliance with Condition D.1.7, the Permittee shall maintain the following:
  - (1) Records of the following operational parameters taken once per shift during normal operation when venting directly to the atmosphere:
    - (A) Inlet and outlet differential static pressure; and
    - (B) Cleaning cycle: frequency and differential pressure.
  - (2) Documentation of all response steps implemented, per event .
  - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
  - (4) Quality Assurance/Quality Control (QA/QC) procedures.
  - (5) Operator standard operating procedures (SOP).
  - (6) Manufacturer's specifications or its equivalent.
  - (7) Equipment "troubleshooting" contingency plan.
  - (8) Documentation of the dates vents are redirected.
- (c) To document compliance with Condition D.1.8, the Permittee shall maintain records of the results of the inspections required under Condition D.1.8.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

#### **SECTION D.2**

#### **FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]

A landplaster production process, consisting of the following equipment:

- (a) A conveying system, consisting of belt and screw conveyors, with particulate matter emissions controlled by partial or total enclosure, and exhausting to associated processes or directly to the atmosphere. Some portions of the conveyor system are controlled by one (1) baghouse, identified as MBH-2, and exhausting through one (1) stack, identified as M-2.
- (b) One (1) dryer mill bin #1, with a maximum capacity of 60 tons and a throughput of 40 tons per hour, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.
- (c) One (1) dryer mill bin #2, with a maximum capacity of 60 tons and a throughput of 40 tons per hour, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.
- (d) One (1) dryer mill #1, with a maximum throughput of 35 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-8, and exhausting through one (1) stack, identified as M-8.
- (e) One (1) natural gas-fired burner for the dryer mill #1, with a heat input capacity of 20 MMBtu per hour, and exhausting through one (1) stack, identified as M-8.
- (f) One (1) screening station #1, with a maximum throughput of 35 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-8, and exhausting through one (1) stack, identified as M-8.
- (g) One (1) dryer mill #2, with a maximum throughput of 35 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-12, and exhausting through one (1) stack, identified as M-12.
- (h) One (1) natural gas-fired burner for the dryer mill #2, with a heat input capacity of 20 MMBtu per hour, and exhausting through one (1) stack, identified as M-12.
- (i) One (1) screening station #2, with a maximum throughput of 35 tons per hour, with particulate matter emissions controlled by one (1) baghouse identified as MBH-12, and exhausting through one (1) stack, identified as M-12.
- (j) One (1) mill landplaster bin, with a maximum capacity of 20 tons, with particulate matter controlled by one (1) baghouse, identified as MBH-19, and exhausting through one stack, identified as M-19.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

# D.2.1 Nonattainment Area Particulate Limitation [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations), the PM emissions from landplaster production process shall be limited as follows:

(a) PM emissions from dryer mill #1 and associated screen exhausting to stack M-8 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).

- (b) PM emissions from dryer mill #2 and associated screen exhausting to stack M-12 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (c) PM emissions from the landplaster bin exhausting to stack M-19 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (d) PM emissions from the conveying system exhausting to stack M-2 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (e) PM emissions from the natural gas-fired burners for dryer mills #1 and #2 exhausting to stacks M-8 and M-12 shall each not exceed 0.03 grains per dry standard cubic foot (gr/dscf).

# D.2.2 Lake County PM<sub>10</sub> Emission Requirements [326 IAC 6-1-10.1]

Pursuant to 326 IAC 6-1-10.1 (Lake County PM<sub>10</sub> Emission Requirements), the PM<sub>10</sub> emissions from the landplaster conveying facility exhausting from stack M-2 shall not exceed 0.015 grains per dry standard cubic foot and 2.21 pounds per hour.

# D.2.3 Emission Offset Minor PM Limit [326 IAC 2-3]

Pursuant to CP-089-8657-00333, issued on January 8, 1998, the PM emissions from dryer mill #2 and associated screen exhausting to stack M-12 shall not exceed 0.010 grains per dry standard cubic foot. Compliance with this limit makes 326 IAC 2-3 (Emission Offset) not applicable. Compliance with this limit will also satisfy the requirements of 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations).

# D.2.4 Emission Offset Minor NO<sub>x</sub> Limit [326 IAC 2-3]

Pursuant to CP-089-8657-00333, issued on January 8, 1998, natural gas throughput to the natural gas fired burner for dryer mill #2, exhausting to stack M-12, shall not exceed 172.8 million cubic feet per consecutive twelve (12) month period.

Compliance with this limit will assure that the  $NO_X$  emissions from the facilities permitted under CP-089-8657-00333, issued on January 8, 1998, shall remain less than twenty-five (25) tons per year and that the requirements of 326 IAC 2-3 are not applicable.

#### D.2.5 New Source Performance Standard [326 IAC 12] [40 CFR 60, Subpart OOO]

Pursuant to 40 CFR 60, Subpart OOO (Nonmetallic Mineral Processing Plants), PM emissions from the dryer mill #2 and associated screen exhausting to stack M-12 shall not exceed 0.05 grams per dry standard cubic meter (g/dscm) and seven percent (7%) opacity. Any fugitive emissions associated with these facilities shall not exceed ten percent (10%) opacity.

# D.2.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

#### **Compliance Determination Requirements**

#### D.2.7 Testing Requirements [326 IAC 2-7-6(1),(6)]

- (a) Pursuant to CP 089-8657-00333, issued on January 8, 1998, the Permittee shall perform compliance testing for PM from the dryer mill #2 and associated screen exhausting to stack M-12 within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up. The tests shall be performed in accordance with Section C Performance Testing and 40 CFR 60.675.
- (b) The Permittee is not required to test the dryer mill #1 and associated screen exhausting to stack M-8 by this permit. However, IDEM may require compliance testing at any

specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limits specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### D.2.8 Particulate Matter (PM)

Pursuant to OP 45-07-93-0510, issued on December 19, 1989, and CP-089-8657-00333, issued on January 8, 1998, the baghouses for PM control shall be in operation at all times when the associated facilities are in operation.

# Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

# D.2.9 Visible Emissions Notations

- (a) Visible emission notations of the stack exhausts M-2, M-8, M-12 and M-19 shall be performed once per shift during normal daylight operations when exhausting directly to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

#### D.2.10 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the landplaster production process, at least once per shift when the associated facilities are in operation when venting directly to the atmosphere.

- (a) Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across baghouses MBH-2 and MBH-19 shall be maintained within the range of 0.5 and 6.0 inches of water, or a range established during the latest stack test.
- (b) Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across baghouses MBH-8 and MBH-12 shall be maintained within the range of 2.0 and 8.0 inches of water, or a range established during the latest stack test.

The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned ranges for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

## D.2.11 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the landplaster production process. All defective bags shall be replaced.

## D.2.12 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

# Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

# D.2.13 Record Keeping Requirements

- (a) To document compliance with Condition D.2.4, the Permittee shall maintain records of natural gas throughput to dryer mill #2.
- (b) To document compliance with Condition D.2.9, the Permittee shall maintain records of visible emission notations of the stack exhausts M-2, M-8, M-12 and M-19 once per shift.
- (c) To document compliance with Condition D.2.10, the Permittee shall maintain the following:
  - (1) Records of the following operational parameters taken once per shift during normal operation when venting directly to the atmosphere:
    - (A) Inlet and outlet differential static pressure; and
    - (B) Cleaning cycle: frequency and differential pressure.
  - (2) Documentation of all response steps implemented, per event.
  - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
  - (4) Quality Assurance/Quality Control (QA/QC) procedures.
  - (5) Operator standard operating procedures (SOP).
  - (6) Manufacturer's specifications or its equivalent.
  - (7) Equipment "troubleshooting" contingency plan.

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- (8) Documentation of the dates vents are redirected.
- (d) To document compliance with Condition D.2.11, the Permittee shall maintain records of the results of the inspections required under Condition D.2.11.
- (e) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

# D.2.14 Reporting Requirements

A quarterly summary of the information to document compliance with Condition 2.4 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

#### **SECTION D.3**

#### **FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]

A stucco production process, consisting of the following equipment::

- (a) One (1) kettle feed bin #2, with a maximum capacity of 60 tons, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-8, and exhausting through one (1) stack, identified as M-8.
- (b) One (1) calcining kettle #2, with a maximum throughput of 45 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-16, and exhausting through one (1) stack, identified as M-16.
- (c) Six (6) natural-gas fired burners for the calcining kettle #2, each with a heat input capacity of 5 MMBtu per hour, and exhausting through one (1) stack, identified as M-14.
- (d) One (1) kettle feed bin #3, with a maximum capacity of 60 tons, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-8, and exhausting through one (1) stack, identified as M-8.
- (e) One (1) calcining kettle #3, with a maximum throughput of 30 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-1, and exhausting through one (1) stack, identified as M-1.
- (f) One (1) natural-gas fired burner for the calcining kettle #3, with a heat input capacity of 15 MMBtu per hour, and exhausting through one (1) stack, identified as M-6.
- (g) One (1) hot pit #3, with a maximum throughput of 30 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-1, and exhausting through one (1) stack, identified as M-1.
- (h) A conveying system, with a maximum throughput of 70 tons per hour, with particulate matter emissions controlled by partial or total enclosure, and exhausting to associated processes or directly to the atmosphere. Some portions of the conveyor system are controlled by one (1) baghouse, identified as MBH-2, and exhausting through one (1) stack, identified as M-2.
- (i) One (1) stucco storage bin, with a maximum capacity of 50 tons, with particulate matter controlled by one (1) baghouse, identified as MBH-2, and exhausting through one (1) stack, identified as M-2.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

# Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.3.1 Nonattainment Area Particulate Limitation [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations), the PM emissions from the stucco production process shall be limited as follows:

- (a) PM emissions from kettle feed bins #2 and #3 exhausting to stack M-8 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (b) PM emissions from calcining kettle #2 exhausting to stack M-16 shall not exceed 0.03

grains per dry standard cubic foot (gr/dscf).

- (c) PM emissions from the natural gas-fired burners for kettle #2 exhausting to stack M-14 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (d) PM emissions from the natural gas-fired burners for kettle #3 exhausting to stack M-6 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (e) PM emissions from hot pit #3 exhausting to stack M-1 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (f) PM emissions from the stucco storage bin exhausting to stack M-2 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).

# D.3.2 Lake County PM<sub>10</sub> Emission Requirements [326 IAC 6-1-10.1]

Pursuant to 326 IAC 6-1-10.1 (Lake County  $PM_{10}$  Emission Requirements), the  $PM_{10}$  emissions shall be limited as follows:

- (a) The PM<sub>10</sub> emissions from kettle #3 exhausting to stack M-1 shall not exceed 0.012 grains per dry standard cubic foot and 3.210 pounds per hour.
- (b) The PM<sub>10</sub> emissions from stucco storage and conveying exhausting to stack M-2 shall not exceed 0.015 grains per dry standard cubic foot and 2.210 pounds per hour.

# D.3.3 Emission Offset Minor PM Limit [326 IAC 2-3]

Pursuant to CP 089-8657-00333, issued on January 8, 1998, the PM emissions shall be limited as follows:

- (a) PM emissions from kettle #2 exhausting to stack M-16 shall not exceed 0.010 grains per dry standard cubic foot.
- (b) PM emissions from kettle feed bins #2 and #3 exhausting to stack M-8 shall not exceed 0.008 grains per dry standard cubic foot.

Compliance with these limits make 326 IAC 2-3 (Emission Offset) not applicable. Compliance with these limits also will satisfy the requirements of 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations) for these facilities.

#### D.3.4 Emission Offset Minor NO<sub>x</sub> Limit [326 IAC 2-3]

Pursuant to CP-089-8657-00333, issued on January 8, 1998, natural gas throughput to the six (6) natural gas fired burners for calcining kettle #2 shall not exceed 338.4 million cubic feet per consecutive twelve (12) month period, including natural gas throughput to the wet and dry end seal natural gas burners, and the gauging water heater, which are found in Section D.4.

Compliance with this limits will assure that the  $NO_{\chi}$  emissions from the facilities permitted under CP-089-8657-00333, issued on January 8, 1998 shall remain less than twenty-five (25) tons per year and that the requirements of 326 IAC 2-3 are not applicable.

# D.3.5 New Source Performance Standard [326 IAC 12] [40 CFR 60, Subpart UUU]

Pursuant to 40 CFR 60, Subpart UUU (Calciners and Dryers in Mineral Industries), PM emissions from the kettle #2 exhausting to stack M-16 shall not exceed 0.092 grams per dry standard cubic meter (g/dscm) and ten percent (10%) opacity.

# D.3.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

## **Compliance Determination Requirements**

# D.3.7 Testing Requirements [326 IAC 2-7-6(1),(6)]

- (a) Pursuant to CP 089-8657-00333, issued on January 8, 1998, the Permittee shall perform compliance testing for PM from kettle #2 exhausting to stack M-16 and kettle feed bins exhausting to stack M-8 within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up. The tests shall be performed in accordance with Section C Performance Testing and 40 CFR 60.736.
- (b) The Permittee is not required to test the remaining stucco production facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the limits specified in Conditions D.3.1 and D.3.2 shall be determined by a performance test conducted in accordance with Section C Performance Testing.

# D.3.8 Particulate Matter (PM)

Pursuant to OP 45-07-93-0508, issued on December 19, 1989, and CP-089-8657-00333, issued on January 8, 1998, the baghouses for PM control shall be in operation at all times when the associated facilities are in operation.

# Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

### D.3.9 Visible Emissions Notations

- (a) Visible emission notations of the stack exhausts M-1, M-2, M-16 and M-8 shall be performed once per shift during normal daylight operations when exhausting directly to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

#### D.3.10 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the stucco production process, at least once per shift when the associated facilities are in operation when venting directly to the atmosphere.

(a) Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across baghouses MBH-1, MBH-2 and MBH-16 shall be

maintained within the range of 0.5 and 6.0 inches of water, or a range established during the latest stack test.

(b) Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across baghouse MBH-8 shall be maintained within the range of 2.0 and 8.0 inches of water, or a range established during the latest stack test.

The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

# D.3.11 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the stucco production process. All defective bags shall be replaced.

#### D.3.12 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).

#### Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

# D.3.13 Record Keeping Requirements

- (a) To document compliance with Condition D.3.4, the Permittee shall maintain records of natural gas throughput to the six (6) natural gas fired burners for calcining kettle #2.
- (b) To document compliance with Condition D.3.9, the Permittee shall maintain records of visible emission notations of the stack exhausts M-1, M-2, M-16 and M-8 once per shift.
- (c) To document compliance with Condition D.3.10, the Permittee shall maintain the following:
  - (1) Records of the following operational parameters taken once per shift during normal operation when venting directly to the atmosphere:

- (A) Inlet and outlet differential static pressure; and
- (B) Cleaning cycle: frequency and differential pressure.
- (2) Documentation of all response steps implemented, per event.
- (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
- (4) Quality Assurance/Quality Control (QA/QC) procedures.
- (5) Operator standard operating procedures (SOP).
- (6) Manufacturer's specifications or its equivalent.
- (7) Equipment "troubleshooting" contingency plan.
- (8) Documentation of the dates vents are redirected.
- (d) To document compliance with Condition D.3.11, the Permittee shall maintain records of the results of the inspections required under Condition D.3.11.
- (e) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

#### D.3.14 Reporting Requirements

A quarterly summary of the information to document compliance with Condition 3.4 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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#### **SECTION D.4**

#### **FACILITY CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]

A gypsum wallboard manufacturing line, consisting of the following equipment:

- (a) One (1) stucco storage bin, with a maximum capacity of 1200 tons, with particulate matter controlled by one (1) bin vent, identified as BBH-11, and exhausting through one (1) stack, identified as B-11.
- (b) One (1) stucco surge bin with hopper, with a maximum capacity of 2 tons, with particulate matter controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
- (c) One (1) (HRA) landplaster feed bin, with a maximum capacity of 20 tons, with particulate matter emissions controlled by one (1) bin vent, identified as BBH-12, and exhausting inside the building through one (1) stack, identified as B-12.
- (d) One (1) HRA mill additive bin (sugar), with a maximum capacity of 10 cubic feet, feeding the HRA ball mill, with particulate matter emissions uncontrolled, and exhausting inside the building.
- (e) One (1) HRA ball mill, with a maximum throughput of 2400 pounds per hour, with particulate matter controlled by one (1) baghouse, identified as BBH-18, and exhausting inside the building through one (1) stack, identified as B-18.
- (f) One (1) HRA bin, with a maximum capacity of 3 tons, with particulate matter controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
- (g) One (1) additive refill bin (starch), with a maximum capacity of 3 tons, with particulate matter controlled by one (1) baghouse, identified as BBH-16, and exhausting inside the building through one (1) stack, identified as B-16.
- (h) One (1) additive refill receiver (vermiculite), controlled by one (1) vacuum receiver, identified as BVH-17, and exhausting inside the building through one (1) stack, identified as B-17.
- (i) Two (2) additive bulk storage bins (starch and vermiculite), each with a maximum capacity of 75 tons, with particulate matter emissions controlled by two (2) separate baghouses, identified as BBH-14 (starch) and BBH-15 (vermiculite), and all exhausting to two (2) respective stacks, identified as B-14 and B-15.
- (j) One (1) additive surge bin (vermiculite), with a maximum capacity of 5 tons, with particulate matter controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
- (k) One (1) glass fiber additive bin, with a maximum capacity of six (6) cubic feet, with particulate matter emissions uncontrolled, and exhausting inside the building.
- (I) One (1) paper fiber mill with cyclone separator, with a maximum throughput of 900 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.

A gypsum wallboard manufacturing line, consisting of the following equipment: (cont'd)

- (m) One (1) mixing screw conveyor, with a maximum throughput of 60 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
- (n) One (1) natural gas-fired gauging water heater, with a heat input capacity of 3.5 MMBtu per hour, and exhausting through one (1) stack, identified as B-19.
- (o) One (1) wet mixer, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
- (p) One (1) wet zone kiln natural gas-fired burner, with a heat input capacity of 67 MMBtu per hour, and exhausting through one (1) stack, identified as B-20.
- (q) One (1) dry zone kiln natural gas-fired burner, with a heat input capacity of 67 MMBtu per hour, and exhausting through one (1) stack, identified as B-20.
- (r) One (1) wet end seal natural gas-fired burner, with a heat input capacity of 2.5 MMBtu per hour, and exhausting through one (1) stack, identified as B-20.
- (s) One (1) dry end seal natural gas-fired burner, with a heat input capacity of 2.5 MMBtu per hour, and exhausting through one (1) stack, identified as B-20.
- (t) One (1) wallboard drying kiln, with a maximum throughput of 78,000 square feet of wallboard per hour, and exhausting through one (1) main stack, identified as B-20.
- (u) One (1) end saw, with a maximum throughput of 78,000 square feet of wallboard per hour, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-25, and exhausting through one (1) stack, identified as B-25.
- (v) One (1) waste reclaim shredder, with a maximum throughput of 50 tons per hour, with particulate matter controlled by two (2) baghouses identified as WRBH-1 and WRBH-2, and exhausting through two (2) stacks, identified as WR-1 and WR-2, respectively.
- (w) One (1) existing cut-back saw, with particulate matter controlled by one (1) baghouse, identified as BBH-25, and exhausting through one (1) stack, identified as B-25.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

# Emission Limitations and Standards [326 IAC 2-7-5(1)]

# D.4.1 Emission Offset Minor PM Limit [326 IAC 2-3]

Pursuant to CP-089-8657-00333, issued on January 8, 1998, the PM emissions shall be limited as follows:

- (a) PM emissions from the stucco storage bin exhausting to stack B-11 shall not exceed 0.008 grains per dry standard cubic foot.
- (b) PM emissions from the landplaster feed bin exhausting to stack B-12 shall not exceed 0.008 grains per dry standard cubic foot.
- (c) PM emissions from the HRA mill additive bin (sugar) exhausting inside the building shall

not exceed 0.010 grains per dry standard cubic foot.

- (d) PM emissions from the HRA ball mill exhausting to stack B-18 shall not exceed 0.010 grains per dry standard cubic foot.
- (e) PM emissions from the dry additive system exhausting to stack B-13 shall not exceed 0.008 grains per dry standard cubic foot.
- (f) PM emissions from the additive storage bin vacuum receivers and additive refill vacuum receivers exhausting to stacks B-14, B-15, B-16 and B-17 shall not exceed 0.008 grains per dry standard cubic foot.
- (g) PM emissions from the end saws exhausting to stack B-25 shall not exceed 0.008 grains per dry standard cubic foot.

Compliance with these limits make 326 IAC 2-3 (Emission Offset) not applicable. Compliance with these limits will also satisfy the requirements of 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations) for these facilities.

#### D.4.2 Nonattainment Area Particulate Limitation [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations), the PM emissions from the new gypsum wallboard line shall be limited as follows:

- (a) PM emissions from the stucco storage bin exhausting to stack B-11 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (b) PM emissions from the landplaster feed bin exhausting to stack B-12 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (c) PM emissions from the HRA mill additive bin (sugar) exhausting inside the building shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (d) PM emissions from the HRA ball mill exhausting to stack B-18 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (e) PM emissions from the dry additive system exhausting to stack B-13 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (f) PM emissions from the additive storage bin vacuum receivers and additive refill vacuum receivers exhausting to stacks B-14, B-15, B-16 and B-17 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (g) PM emissions from the wallboard drying kiln exhausting to stack B-20 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (h) PM emissions from the natural gas-fired burners exhausting to stack B-20 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (i) PM emissions from the natural gas-fired gauging water heater exhausting to stack B-19 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (j) PM emissions from the end saws exhausting to stack B-25 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (k) PM emissions from the waste wallboard shredder exhausting to stacks WR-1 and WR-2

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shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).

(I) PM emissions from the cut back saw exhausting to stack B-25 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).

#### D.4.3 Emission Offset Minor NO<sub>x</sub> Limit [326 IAC 2-3]

Pursuant to CP-089-8657-00333, issued on January 8, 1998, natural gas throughput shall be limited as follows:

- (a) Natural gas throughput to the wet zone kiln and dry zone kiln natural gas burners, both exhausting to stack B-20, shall not exceed 1155.6 million cubic feet per consecutive twelve (12) month period.
- Natural gas throughput to the gauging water heater exhausting to stack B-19, and the wet (b) end seal and dry end seal natural gas burners, exhausting to stack B-20, shall not exceed 338.4 million cubic feet per consecutive twelve (12) month period, including natural gas throughput to the six (6) natural gas fired burners for calcining kettle # 2, found in Section D.2.

Compliance with these limits will assure that the NO<sub>x</sub> emissions from the facilities permitted under CP-089-8657-00333, issued on January 8, 1998 shall remain less than twenty-five (25) tons per year and that the requirements of 326 IAC 2-3 are not applicable.

#### D.4.4 New Source Performance Standard [326 IAC 12] [40 CFR 60, Subpart OOO]

Pursuant to 40 CFR 60. Subpart OOO (Nonmetallic Mineral Processing Plants), PM emissions from the waste wallboard shredder exhausting to stacks WR-1 and WR-2 shall not exceed 0.05 grams per dry standard cubic meter (g/dscm) and seven percent (7%) opacity. Any fugitive emissions associated with these facilities shall not exceed ten percent (10%) opacity.

#### Preventive Maintenance Plan [326 IAC 2-7-5(13)] D.4.5

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

# **Compliance Determination Requirements**

#### D.4.6 Testing Requirements [326 IAC 2-7-6(1),(6)]

- Pursuant to CP 089-8657-00333, issued on January 8, 1998, the Permittee shall perform compliance testing for PM from the stucco storage bin exhausting to stack B-11, the dry additive system exhausting to stack B-13, the various saws exhausting to stack B-25, and the waste wallboard shredder exhausting to stacks WR-1 and WR-2, within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up. The tests shall be performed in accordance with Section C - Performance Testing and 40 CFR 60.675 (for the waste wallboard shredder).
- (b) The Permittee is not required to test the remaining wallboard production facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facilities are in compliance. If testing is required by IDEM, compliance with the PM limits specified in Conditions D.4.1 and D.4.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### Particulate Matter (PM) D.4.7

Pursuant to CP 089-7755-00333, issued on February 19, 1997, and CP 089-8657-000333, issued on January 8, 1998, the baghouses for PM control shall be in operation at all times when the associated facilities are in operation.

# Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.4.8 Visible Emissions Notations

- (a) Visible emission notations of the stack exhausts B-11 through B-18, B-25, WR-1 and WR-2, shall be performed once per shift during normal daylight operations when exhausting directly to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

# D.4.9 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the wallboard production process, at least once per shift when the associated facilities are in operation when venting directly to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of 0.5 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

#### D.4.10 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the new wallboard production process. All defective bags shall be replaced.

# D.4.11 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).
- (b) For single compartment baghouses, failed units and the associated process will be shut

down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

# Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

#### D.4.12 Record Keeping Requirements

- (a) To document compliance with Condition D.4.3, the Permittee shall maintain records of natural gas throughput to the wet zone kiln and dry zone kiln natural gas burners, the gauging water heater, and the wet end seal and dry end seal natural gas burners.
- (b) To document compliance with Condition D.4.8, the Permittee shall maintain records of visible emission notations of the stack exhausts B-11 through B-18, B-25, WR-1 and WR-2, once per shift.
- (c) To document compliance with Condition D.4.9, the Permittee shall maintain the following:
  - (1) Records of the following operational parameters taken once per shift during normal operation when venting directly to the atmosphere:
    - (A) Inlet and outlet differential static pressure; and
    - (B) Cleaning cycle: frequency and differential pressure.
  - (2) Documentation of all response steps implemented, per event.
  - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
  - (4) Quality Assurance/Quality Control (QA/QC) procedures.
  - (5) Operator standard operating procedures (SOP).
  - (6) Manufacturer's specifications or its equivalent.
  - (7) Equipment "troubleshooting" contingency plan.
  - (8) Documentation of the dates vents are redirected.
- (d) To document compliance with Condition D.4.10, the Permittee shall maintain records of the results of the inspections required under Condition D.4.10.
- (e) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

#### D.4.13 Reporting Requirements

A quarterly summary of the information to document compliance with Condition 4.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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#### **SECTION D.5**

#### **FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]

A joint treatment process, consisting of the following equipment:

- (a) A pneumatic conveying system from the bulk storage silos to the scale hoppers, with particulate matter emissions controlled by three (3) baghouses, identified as JBH-11, JBH-12 and JBH-13, and exhausting through three (3) stacks, identified as J-11, J-12 and J-13, respectively.
- (b) Four (4) scale hoppers, with particulate matter emissions uncontrolled, and exhausting inside the building.
- (c) A ready-mix line, consisting of the following equipment:
  - (1) Two (2) holding hoppers, each with a maximum throughput of 5 tons per hour, with particulate matter emissions controlled by two (2) baghouses, identified as JBH-1 and JBH-2, and each exhausting through two (2) stacks, identified as J-1 and J-2, respectively.
  - (2) One (1) dry additives bag dump, with a maximum throughput of 1176 pounds per hour, with particulate matter controlled by three (3) baghouses, identified as JBH-1, JBH-2 and JVH-3, and exhausting through three (3) stacks, identified as J-1, J-2 and J-3, respectively.
  - (3) Two (2) wet mixers, each with a maximum throughput of 7.25 tons per hour, and exhausting inside the building.
- (d) A dry joint compound line, consisting of the following equipment:
  - (1) One (1) dry additives bag dump, with a maximum throughput of 600 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JVH-8, and exhausting through one (1) stack, identified as J-8.
  - One (1) reclaim screw conveyor, with a maximum throughput of 1,184 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-7, and exhausting through one (1) stack, identified as J-7.
  - One (1) dry joint mixer, with a maximum throughput of 5,678 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-7, and exhausting through one (1) stack, identified as J-7.
  - (4) One (1) packing machine, with a maximum throughput of 5,100 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-14, and exhausting inside the building through stack J-14.
- (e) A dry texture paint line, consisting of the following equipment:
  - (1) One (1) dry additives bag dump, with a maximum throughput of 390 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-5, and exhausting through one (1) stack, identified as J-5.

# Facility Description [326 IAC 2-7-5(15)]

A dry texture paint line, consisting of the following equipment (cont'd):

- (2) One (1) reclaim screw conveyor, with maximum throughput of 502 pounds per hour, and a polystyrene screw conveyor, with a maximum capacity of 75 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-4, and exhausting through one (1) stack, identified as J-4.
- One (1) dry texture paint mixer, with a maximum throughput of 4650 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-4, and exhausting through one (1) stack, identified as J-4.
- (4) One (1) packing machine, with a maximum throughput of 4650 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-4, and exhausting through one (1) stack, identified as J-4.
- (5) One (1) dry paint weigh station, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-15, and exhausting through one (1) stack, identified as J-15 inside the building.
- (6) One (1) dry additive conveying system, with a maximum throughput of 400 pounds per hour, with particulate emissions controlled by one (1) vacuum receiver, identified as JVH-6, and exhausting through one (1) stack, identified as J-6.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

# D.5.1 Lake County PM<sub>10</sub> Emission Requirements [326 IAC 6-1-10.1]

Pursuant to 326 IAC 6-1-10.1 (Lake County  $PM_{10}$  Emission Requirements), the  $PM_{10}$  emissions from the dry treatment process facilities shall be limited as follows:

- (a) PM<sub>10</sub> emissions from the ready mix hoppers and bag dump exhausting to stacks J-1, J-2 and J-3 shall each not exceed 0.017 pounds per ton and 0.100 pounds per hour.
- (b) PM<sub>10</sub> emissions from the dry texture paint mixer and packing machine exhausting to stack J-4 shall not exceed 0.020 grains per dry standard cubic foot and 0.190 pounds per hour.
- (c) PM<sub>10</sub> emissions from the dry texture paint bag dump exhausting to stack J-5 shall not exceed 0.010 grains per dry standard cubic foot and 0.100 pounds per hour.
- (d) PM<sub>10</sub> emissions from the dry texture paint conveying exhausting to stack J-6 shall not exceed 0.010 grains per dry standard cubic foot and 0.030 pounds per hour.
- (e) PM<sub>10</sub> emissions from the dry joint mixing and conveying exhausting to stack J-7 shall not exceed 0.020 grains per dry standard cubic foot and 0.340 pounds per hour.
- (f) PM<sub>10</sub> emissions from the dry joint bag dump exhausting to stack J-8 shall not exceed 0.010 grains per dry standard cubic foot and 0.020 pounds per hour.

#### D.5.2 Nonattainment Area Particulate Limitation [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations), the PM emissions from the packing machine exhausting to stack J-14 and the dry paint weigh station exhausting to stack J-15 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).

# D.5.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

# **Compliance Determination Requirements**

#### D.5.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

- (a) The Permittee shall perform compliance testing for PM<sub>10</sub> from the ready mix hopper #1 exhausting to stack J-1 within 12 months after issuance of this permit. The tests shall be performed in accordance with Section C Performance Testing.
- (b) The Permittee is not required to test the ready mix hopper #2 or bag dump, the dry texture paint mixing and packing, bag dump or conveying, or the dry joint mixing and packing or bag dump by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facilities are in compliance. If testing is required by IDEM, compliance with the PM and PM<sub>10</sub> limits specified in Conditions D.5.1 and D.5.2 shall be determined by a performance test conducted in accordance with Section C Performance Testing.

#### D.5.5 Particulate Matter (PM)

Pursuant to OP 45-07-93-0516, OP 45-07-93-0517 and OP 45-07-93-0518, issued on December 19, 1989, the baghouses for PM control shall be in operation at all times when the associated facilities are in operation.

# Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.5.6 Visible Emissions Notations

- (a) Visible emission notations of the stack exhausts J-1, J-2, J-3, J-4, J-5, J-6, J-7, J-8, J-11, J-12, J-13, J-14 and J-15 shall be performed once per shift during normal daylight operations when exhausting directly to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

# D.5.7 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the joint treatment processes, at least once per shift when the associated facilities are in operation when venting directly to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of 0.5 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

# D.5.8 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the joint treatment processes. All defective bags shall be replaced.

# D.5.9 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

#### Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

## D.5.10 Record Keeping Requirements

- (a) To document compliance with Condition D.5.6, the Permittee shall maintain records of visible emission notations of the stack exhausts J-1, J-2, J-3, J-4, J-5, J-6, J-7, J-8, J-11, J-12, J-13, J-14 and J-15 once per shift.
- (b) To document compliance with Condition D.5.7, the Permittee shall maintain the following:
  - (1) Records of the following operational parameters taken once per shift during normal operation when venting directly to the atmosphere:
    - (A) Inlet and outlet differential static pressure; and
    - (B) Cleaning cycle: frequency and differential pressure.

- (2) Documentation of all response steps implemented, per event.
- (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
- (4) Quality Assurance/Quality Control (QA/QC) procedures.
- (5) Operator standard operating procedures (SOP).
- (6) Manufacturer's specifications or its equivalent.
- (7) Equipment "troubleshooting" contingency plan.
- (8) Documentation of the dates vents are redirected.
- (c) To document compliance with Condition D.5.8, the Permittee shall maintain records of the results of the inspections required under Condition D.5.8.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

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#### **SECTION D.6**

#### **FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]

The following insignificant activities:

- (a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (c) One (1) landplaster baler, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.
- (d) A polypropylene bag grinding process, consisting of the following equipment:
  - (1) A bag storage and conveying system, with two (2) bins and two (2) screw conveyors, with negligible emissions, and exhausting inside the building.
  - (2) Two (2) polypropylene bags grinding machines, each with a maximum throughput of 20 pounds per hour, with particulate matter emissions controlled by partial enclosure, and exhausted to the ground polypropylene bins.
  - (3) Three (3) ground polypropylene bins with screens, with a combined maximum capacity of 360 cubic feet, with particulate matter emissions uncontrolled, and exhausting inside the building.
  - (4) One (1) weigh feeder, with a maximum throughput of 47 pounds per hour, with particulate matter emissions uncontrolled, and exhausting inside the building.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

# Emission Limitations and Standards [326 IAC 2-7-5(1)]

# D.6.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a matter that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

First Significant Permit Modification No. 089-11767 Permit Reviewer: Patrick Brennan/MES

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# D.6.2 Nonattainment Area Particulate Limitation [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations), the PM emissions from the welding equipment, landplaster baler, and polypropylene bag grinding process shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).

United States Gypsum Company East Chicago, Indiana First Significant Permit Modification No. 089-11767 Permit Reviewer: Patrick Brennan/MES Permit Reviewer: Bryan Sheets

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# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR QUALITY COMPLIANCE BRANCH**

# **PART 70 OPERATING PERMIT CERTIFICATION**

United States Gypsum Company Source Name:

301 Riley Road, East Chicago, Indiana 46312 Source Address:

ailing Address: 301 Riley Road, East Chicago, Indiana 46312 art 70 Permit No.: T 089-7532-00333	
This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.	
Please check what document is being certified:	
9 Annual Compliance Certification Letter	
9 Test Result (specify)	
9 Report (specify)	
9 Notification (specify)	
9 Other (specify)	
certify that, based on information and belief formed after reasonable inquiry, the statements ar nformation in the document are true, accurate, and complete.	nd
Signature:	
Printed Name:	
Title/Position:	
Date:	

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# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

COMPLIANCE BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674

Fax: 317-233-5967

# PART 70 OPERATING PERMIT EMERGENCY/DEVIATION OCCURRENCE REPORT

Source Name: United States Gypsum Company

Source Address: 301 Riley Road, East Chicago, Indiana 46312 Mailing Address: 301 Riley Road, East Chicago, Indiana 46312

Part 70 Permit No.: T 089-7532-00333

his form consists of 2 page
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Page 1 of 2

Ch	Check either No. 1 or No.2			
9	1.	This is an emergency as defined in 326 IAC 2-7-1(12) CThe Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and CThe Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16		
9	2.	This is a deviation, reportable per 326 IAC 2-7-5(3)(c)		

CThe Permittee must submit notice in writing within ten (10) calendar days

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency/Deviation:
Describe the cause of the Emergency/Deviation:
Describe the cause of the Emergency/Deviation.

# First Significant Permit Modification No. 089-11767 Permit Reviewer: Patrick Brennan/MES

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If any of the following are not applicable, mark N/A	Page 2 of 2
Date/Time Emergency/Deviation started:	
Date/Time Emergency/Deviation was corrected:	
Was the facility being properly operated at the time of the emergency/deviation? Y Describe:	N
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:	
Estimated amount of pollutant(s) emitted during emergency/deviation:	
Describe the steps taken to mitigate the problem:	
Describe the corrective actions/response steps taken:	
Describe the measures taken to minimize emissions:	
If applicable, describe the reasons why continued operation of the facilities are necessimminent injury to persons, severe damage to equipment, substantial loss of capital in loss of product or raw materials of substantial economic value:	
Form Completed by: Title / Position: Date: Phone:	

First Significant Permit Modification No. 089-11767 Permit Reviewer: Patrick Brennan/MES

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# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION**

# Part 70 Quarterly Report

Source Name: **United States Gypsum Corporation** 

Source Address: 301 Riley Road, East Chicago, Indiana 46312 301 Riley Road, East Chicago, Indiana 46312 Mailing Address:

Part 70 Permit No.: T 089-7532-00333

9

Phone:

Facility: Dryer Mill # 2 (Condition D.2.4) Parameter: Natural Gas Throughput

Limit: Less than 172.8 million cubic feet per consecutive twelve (12) month period

I EAD
-------

Month	Natural Gas Throughput (million cubic feet)		
	This Month	Previous 11 Months	12 Month Total

9	No deviation	occurred in	this month.
7	NO deviation	occurred in	uno monu

9	Deviation/s occurred in this month.

Deviation has been reported on:

Submitted by: Title/Position: Signature: Date:

Attach a signed certification to complete this report.

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# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

# Part 70 Quarterly Report

Source Name: United States Gypsum Corporation Source Address: 301 Riley Road, East Chicago, Indiana 46312 Mailing Address: 301 Riley Road, East Chicago, Indiana 46312 Part 70 Permit No.: T 089-7532-00333 Facility: Six (6) natural gas fired burners for calcining kettle #2 (Condition D.3.4) Gauging water heater, wet end seal and dry end seal burners (Condition D.4.3) Parameter: Natural Gas Throughput Less than 338.4 million cubic feet per consecutive twelve (12) month period				
	YEAI	R:		
Month	Natural Gas Throughput (million cubic feet)			
	This Month	Previous 11 Months	12 Month Total	
9	No deviation occurre	ed in this month.		
9 Deviation/s occurred in this month.				
	Deviation has been	reported on:		
Sub	mitted by:			
Title	e/Position:			
Sigr	nature:			
Date	e:			

Attach a signed certification to complete this report.

Phone:

Signature:

Date: Phone: First Significant Permit Modification No. 089-11767 Permit Reviewer: Patrick Brennan/MES

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# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

# Part 70 Quarterly Report

\$ F F	Gource Name: United States Gypsum Corporation Gource Address: Mailing Address: On To Permit No.: To 89-7532-00333 Gacility: Wet Zone Kiln and Dry Zone Kiln Gas Burners (Condition D.4.3) Natural Gas Throughput Less than 1156.6 million cubic feet per consecutive twelve (12) month period			
		YEAI	R:	
Month		Natural Gas Throughput (million cubic feet)		
		This Month	Previous 11 Months	12 Month Total
	9	No deviation occurre	ed in this month.	
	9	9 Deviation/s occurred in this month.		
Deviation has been reported on:				
Submitted by:				
Title/Position:				

Attach a signed certification to complete this report.

First Significant Permit Modification No. 089-11767 Permit Reviewer: Patrick Brennan/MES

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# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

# PART 70 OPERATING PERMIT SEMI-ANNUAL COMPLIANCE MONITORING REPORT

Source Name: United States Gypsum Company Source Address: 301 Riley Road, East Chicago, Indiana 46312 Mailing Address: 301 Riley Road, East Chicago, Indiana 46312 Part 70 Permit No.: T089-7532-00333				
Months: to Year:				
This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted semi-annually. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".				
	IS OCCURRED THIS RE			
9 THE FOLLOWII	NG DEVIATIONS OCCU	RRED THIS REPORTING PER	IOD.	
Compliance Monitoring Requirement (e.g. Permit Condition D.1.3)		Number of Deviations	Date of each Deviation	
Form Completed By: Title/Position: Date: Phone:				

Attach a signed certification to complete this report.

# Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document for a Significant Permit Modification to a Part 70 Operating Permit

Source Name: United States Gypsum Company

Source Location: 301 Riley Road, East Chicago, Indiana 46312

County: Lake

Operation Permit No.: T 089-7532-00333 Significant Permit Modification No.: 089-11767-00333

SIC Code: 3275

Permit Reviewer: Patrick Brennan/MES

On January 23, 2002, the Office of Air Quality (OAQ) had a notice published in the Post Tribune, in Merrillville, Indiana, and in The Times, in Munster, Indiana, stating that U.S. Gypsum Company had applied for a Significant Permit Modification to a Part 70 Operating Permit issued on July 6, 1999, for the elimination of the stack testing requirement for the waste reclaim shredder, and to correct errors in the stack designations, throughput, and capacities of various production facilities. These changes result in no increase in potential emissions of any air pollutant.

The notice also stated that OAQ proposed to issue a Significant Permit Modification and provided information on how the public could review the proposed Significant Permit Modification and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this Significant Permit Modification to a Part 70 Operating Permit should be issued as proposed.

On February 5, 2002, Brian Billingsley of U.S. Gypsum Company, submitted comments on the proposed Part 70 Operating Permit. The comments are as follows: The permit language, if changed, has deleted language as strikeouts and new language **bolded.** 

#### Comment 1:

Baghouse, identified as JBH13, was replaced in kind with a new baghouse. Baghouse JBH13 controls particulate matter from (1) mica storage silo.

Baghouse, identified as JBH11, was replaced in kind with a new baghouse. Baghouse JBH11 controls particulate matter from (1) limestone storage silo.

# Response 1:

These replacements have been noted, but require no change to the Part 70 Operating Permit, since the existing permit already specified compliance monitoring for the baghouses..

On February 7, 2002, Michael Spihlman, Engineering Manager of the U.S. Gypsum Company, also submitted comments on the proposed Part 70 Operating Permit. The comments are as follows: The permit language, if changed, has deleted language as strikeouts and new language bolded.

#### Comment 2:

On page 39 of the draft, Section D.2.10, the paragraph which starts "The Compliance Response Plan for this unit shall..." is duplicated.

U.S. Gypsum Company East Chicago, Indiana Permit Reviewer: PTB/MES

# Response 2:

The duplicate paragraph has been removed from the permit as follows:

The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

#### Comment 3:

On page 43 of the draft, Section D.3.4 states:

"Pursuant to CP 089-8657-00333, issued on January 8, 1998, natural gas throughput to the six (6) natural gas-fired burners for calcining kettle #2 shall not exceed 338.4 million cubic feet per consecutive twelve (12) month period, including natural gas throughput to the wet and dry zone kiln natural gas burners, the wet and dry end seal natural gas burners, and the gauging water heater, of which are found in Section D.4."

As the natural gas throughput to the wet and dry zone kiln burners are separately limited in Section D.4.3(a) they should not be included in Section D.3.4.

# Response 3:

The applicant is correct, the wet and dry zone kiln natural gas burners are included in a separate limit in Condition D.4.3. Condition D.3.4 has been revised as follows:

Pursuant to CP 089-8657-00333, issued on January 8, 1998, natural gas throughput to the six (6) natural gas fired burners for calcining kettle #2 shall not exceed 338.4 million cubic feet per consecutive twelve (12) month period, including natural gas throughput to the wet and dry zone kiln natural gas burners, the wet and dry end seal natural gas burners, and the gauging water heater, of which are found in Section D.4.

# Comment 4:

On page 50 of the draft, Section D.4.2(j) states:

"PM emissions from the cut back saw exhausting to stack B-2 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf)."

The stack designation is incorrect, it should be B-25.

## Response 4:

Condition D.4.2(j) has been revised as follows:

(j) PM emissions from the end saws exhausting to stack B-25 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).

#### Comment 5:

The facility description in the Part 70 Quarterly Report on page 64 of the draft reads:

"Six (6) natural gas-fired boilers for calcining kettle #3 (Condition D.3.4); Gauging water heater, wet end seal and dry end seal burners (Condition D.4.3)"

U.S. Gypsum Company East Chicago, Indiana Permit Reviewer: PTB/MES

The description should read Six (6) natural gas-fired burners for calcining kettle #2

## Response 5:

The facility description in the Part 70 Quarterly Report has been revised as follows:

Facility: Six (6) natural gas fired **burners** for calcining kettle **#2 #3** (Condition D.3.4)

Gauging water heater, wet end seal and dry end seal burners (Condition D.4.3)

# Comment 6: Reinstatement of Stack Testing at the Waste Reclaim Shredder

Note: On January 29, 2002, Mr. Jed Wolkins of the IDEM Compliance Branch spoke with Michael Spihlman, Engineering Manager of the U.S. Gypsum East Chicago plant. During that conversation Mr. Wolkins explained to Mr. Spihlman that the stack testing requirement for the waste reclaim process could not be removed because the shredder was subject to the requirements of NSPS Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants. In earlier discussions with U.S. Gypsum, the Compliance Branch had indicated that testing for this unit could be eliminated. However, at that time, the Compliance Branch was unaware that Subpart OOO applied to this unit.

# The following is Mr. Spihlman's response to Mr. Wolkins telephone conversation:

On January 29, 2002 I received a phone call from Mr. Jed Wolkins of IDEM Compliance Branch regarding IDEM's earlier decision to waive the stack testing requirement for our waste reclaim dust collector (Stack WR-1). This is one of the changes included in the current permit modification. After my conversation with Mr. Wolkins, I asked Mr. Frank May, Director of Environmental and Manufacturing Services for USG Corporation, to comment on the applicability/non-applicability of Subpart OOO to our process. Rather than restate his points, I have chosen to include a copy of that memorandum to be included in our comments.

# Comments of Frank May (USG) regarding applicability of NSPS Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants.

You asked for my opinion concerning the applicability of New Source Performance Standard 40 CFR 60 Subpart OOO to the wallboard recycling system. Briefly, I do not believe this is an applicable standard. Here are my reasons:

- (1) The wallboard is not a "mineral". The common definition of a mineral is a "naturally occurring, homogeneous inorganic substance with a "specific-chemical composition". The recycled material is neither naturally occurring nor homogeneous. The inclusion of additives in the wallboard manufacturing process makes this a non-homogeneous material.
- (2) The NSPS is silent on the subject of gypsum recycling operations. There is a good reason for this. In 1985, when Subpart "OOO" was authorized, there was very little (if any) wallboard recycling. It is unlikely that gypsum recycling was a contemplated process in the development of the standard. This is further supported by the process flow diagram shown in the Background Information Document (BID) used in the development of the standard.
- (3) I have examined the October 23, 1997 memorandum by John B. Rasnic (U.S. EPA) with interest. However, the memo does not address the concept of gypsum recycling. Further, I know of no rule making on this subject which would have included the opportunity for public comment.

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U.S. Gypsum Company East Chicago, Indiana Permit Reviewer: PTB/MES

Beyond these specific issues, a more general concern is the potential for discouraging gypsum recycling. Over the past decade, we have been moving steadily toward greater recycling of our own waste materials. At some future point, I am hopeful that we could absorb some construction wastes back into our process. The unnecessary application of NSPS and similar regulation may only serve to stifle this important development.

# On July 1, 2002, Michael P. Spihlman submitted the following additional comments, reiterating many of the same concerns.

As part of the review and public comment process to the United States Gypsum Company's first significant permit modification to our Part 70 operating permit #T 089-7532-00333, Mr. Jed Wolkins of your office submitted comments regarding the applicability of 40 CFR 60.670 (NSPS Subpart OOO) to our Waste Reclaim Process in January of 2002. It is Mr. Wolkins' opinion that NSPS Subpart OOO should apply to our waste reclaim process equipment (one baghouse designated as WRBH-1, exhausting through one stack, designated as WR-1, inside the building) and stack testing of this equipment must be required. Subsequently, a 60-day stay was placed on the permit modifications on May 14, 2002 to facilitate a resolution of this issue.

On June 10, 2002 we received an e-mail from Mr. Pat Brennan of MES Company stating that, although IDEM still maintains that NSPS Subpart OOO applies to this process, they would accept a Method 22 test. The purpose of this letter is to state our position on the non-applicability of NSPS Subpart OOO to our waste reclaim process. There are several reasons why we believe Subpart OOO does not and should not apply, including the following:

- The wallboard we process in the waste reclaim process is not a "mineral". This process involves grinding "off-quality" board produced in our Sheetrock manufacturing plant and unused, or "scrap" pieces of Sheetrock returned from our customers. Once ground up, the waste material is mixed in with the raw materials used to make new Sheetrock panels. The common definition of a mineral is a "naturally occurring, homogeneous inorganic substance with a specific-chemical composition". The recycled material we process is neither naturally occurring nor homogeneous.
- 2. The gypsum used in our manufacturing plant is 100% synthetic. It is not naturally occurring, but the result of a chemical recombination process at a third-party facility.
- 3. The materials involved in our waste reclaim process are *consumer products*, in this way not unlike cars, refrigerators, and batteries. The recycling of consumer products was most assuredly not an intended target process of the NSPS standard.
- 4. The NSPS is silent on the subject of gypsum recycling operations, and for good reason. In 1985, when Subpart OOO was authorized, there was very little (if any) wallboard recycling. It is highly unlikely that gypsum wallboard recycling was a contemplated process in the development of the standard. It is further unlikely that the regulation of wallboard recycling operations was intended by the standard. This is further supported by the process flow diagram included in the Background Information Document (BID) used in the development of the standard.
- 5. Mr. Wolkins has provided us with the Regulatory and Inspection Manual for Nonmetallic Mineral Processing Plants and a memorandum from John B. Rasnic of U.S. EPA for guidance on the applicability of Subpart OOO. After examining these documents, we have determined that these documents do not address the concept of gypsum recycling. Further, we are aware of no rulemaking on the subjects addressed in these documents which would have included the opportunity for public comment.

6. Mr. Richard Massoels, our local air inspector from IDEM's Northwest Regional Office, has pointed out that Condition D.5.3 of our Part 70 operating permit includes a condition which states that our waste reclaim process must meet the requirements of NSPS Subpart OOO. Mr. Massoels inquired as to why we hadn't questioned this condition in the past. Our lack of prior response is simply due to an oversight on our part. However, neither our lack of previous response nor the presence of the condition in our permit make the condition binding from the standpoint of applying the NSPS standard as a rule of law. We feel that the condition does not agree with NSPS regulations.

Beyond these specific issues, a more general concern is the potential for discouraging wallboard recycling. As previously stated, we already accept some unused Sheetrock from selected customers. Over the past 10 years or so, we have been moving steadily toward greater recycling of our own waste materials and have begun to absorb more and more construction wastes back into our process. The unnecessary application of NSPS and similar regulations may only serve to stifle this important trend.

We ask for a determination that the NSPS Subpart OOO does not apply to our waste reclaim process and further, we ask that condition D.5.3 be removed from our Part 70 operating permit #T089-7532-00333. If you require any additional information or have further comments, please feel free to contact me by mail at the address on our letterhead or by telephone at (219) 392-4656.

# Response 6:

The position of the IDEM OAQ Compliance Branch is that the stack testing requirement for the waste reclaim dust collector cannot be rescinded because the process is subject to NSPS Subpart OOO. In earlier conversations with U.S. Gypsum, the IDEM Compliance had indicated that the stack testing requirement could be rescinded. However, at the time of that conversation, the Compliance Branch was not aware that Subpart OOO was applicable.

OAQ has reviewed the information submitted regarding the applicability of NSPS Subpart OOO, and has the following comments. The U.S. Gypsum comments focus on the following three (3) arguments:

**Wallboard is Not a Mineral** - The applicant states that wallboard is not a mineral because of additives added during the manufacturing process. NSPS Subpart OOO defines a nonmetallic mineral as *a mineral or any mixture of which the majority is a mineral*. While wallboard is not homogeneous gypsum, the majority of the mixture is gypsum, so for the purposes of Subpart OOO, it is a nonmetallic mineral.

Synthetic Gypsum is Not a Mineral - The U.S. Gypsum East Chicago facility uses synthetic gypsum, which is a byproduct of flue gas desulfurization. The U.S. Gypsum position is that synthetic gypsum is not a mineral, and is therefore not subject to NSPS Subpart OOO. Synthetic Gypsum is chemically identical to naturally occurring gypsum. This question has been previously addressed by the U.S. EPA in the assessment of another U.S. Gypsum facility. On April 3, 1997, the U.S. EPA issued Determination Detail Control No. 9800041 (copy enclosed), regarding whether synthetic gypsum is subject to NSPS Subpart OOO. This determination states that since the flue gas desulfurization byproduct has the same chemical composition as natural gypsum, and will be processed in the same manner as naturally occurring gypsum, there is no justification for excluding the product from Subpart OOO. The determination states:

Although the term "nonmetallic mineral" typically relates to naturally occurring substances, for purposes of regulation under Subparts OOO and UUU the term nonmetallic mineral also

includes any substance which has the same chemical composition as a nonmetallic mineral specified in the regulations and which is processed in a manner similar to that used for the naturally occurring substance. Since the flue gas desulfurization byproduct has the same chemical composition as gypsum and will presumably be processed in the same manner as naturally occurring gypsum in the manufacture of gypsum board, there is no justification for the exclusion of the byproduct from applicability under Subparts OOO and UUU. Any process operations which are designated as "affected facilities" in Subparts OOO and UUU and which are used to process gypsum or a substance with the same chemical composition will be subject to the requirements of those regulations. The intent of the Subpart OOO and UUU regulations is to control emissions from the processing of certain types of materials in the operations which are identified as affected facilities. The actual source of those materials has no relevance with regard to the emissions from the affected facilities.

NSPS Subpart OOO Does Not Address Recycling - U.S. Gypsum has stated that after examining NSPS Subpart OOO and its basis documents, they have determined that these documents do not address the concept of gypsum recycling. This question also has been previously addressed by the U.S. EPA in the assessment of a Georgia Pacific facility. On May 22, 1997, the U.S. EPA issued Determination Detail Control No. 9800042 (copy enclosed), regarding whether waste gypsum recycling was subject to Subpart OOO. In that determination the U.S. EPA stated that there is no exemption in Subpart OOO for grinding equipment which is used in nonmetallic mineral "recycling" operations. The determination further states:

There is no provision in Subpart OOO that exempts grinding or crushing equipment used in nonmetallic mineral recycling operations. Although EPA has previously determined that glass and brick recycling operations are not subject to Subpart OOO, the basis for these determinations was the fact that bricks and glass are not nonmetallic minerals, rather than the fact that the processes involved recycling. Since gypsum is one of the nonmetallic minerals listed in the definitions in 60.671, equipment in a recycling process that includes the crushing or grinding of gypsum would be subject to Subpart OOO."

In Subpart OOO, a listing of minerals is provided in the definition of "nonmetallic mineral," and the term is defined as any of the specified minerals or any mixture of which the majority is any of the specified minerals. Therefore, it is not necessary that a material consists solely of one or more of the specified minerals to be regulated as a "nonmetallic mineral" under Subpart OOO. Since the majority of the content of gypsum wallboard is gypsum, wallboard is considered to be equivalent to gypsum, a nonmetallic mineral, under Subpart OOO. Any recycling operations which involve the crushing or grinding of gypsum wallboard would be subject to Subpart OOO.

OAQ has therefore concluded that the stack testing requirement for our waste reclaim dust collector cannot be removed. In the July 1, 2002 letter, Michael Spihlman requested that Condition D.5.3, which implements NSPS Subpart OOO for the waste reclaim shredder, be removed from the Part 70 permit. This condition, now know as Condition 4.4 in the reorganized Part 70 permit, will remain. In addition, Condition D.4.6 has been changed to reinstate the stack testing requirement for the waste wallboard shredder as follows:

#### D.4.6 Testing Requirements [326 IAC 2-7-6(1),(6)]

(a) Pursuant to CP 089-8657-00333, issued on January 8, 1998, the Permittee shall perform compliance testing for PM from the stucco storage bin exhausting to stack B-11, the dry additive system exhausting to stack B-13, and the end various saws exhausting to stack B-25, and the waste wallboard shredder exhausting to stacks WR-1 and WR-2, within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up. The tests shall be performed in accordance with Section C - Performance Testing and 40

CFR 60.675 (for the waste wallboard shredder).

It should be noted that the IDEM OAQ Compliance Branch has also stated that because stacks WR-1 and WR-2 exhaust inside the building, a Method 22 test of visual emissions from the building is sufficient to meet the requirements of Subpart OOO. This test would not require construction of a stack and scaffolding, or involve any worker safety issues, which were the main concerns expressed by U.S. Gypsum when originally requesting that the test be waived.

On February 22, 2002, Michael Spihlman of U.S. Gypsum submitted additional comments on the proposed Part 70 Operating Permit. The comments are as follows: The permit language, if changed, has deleted language as strikeouts and new language bolded.

#### Comment 7:

Section D.4.8, paragraph (a), begins "Visible emission notations of the stack exhausts B-11 through B-18, B-25 and WR-1 shall be performed...".

Several of the stacks, B-12, B-16, B-17, B-18, and WR-1, which are included exhaust inside the building and should not be subject to visible emissions monitoring. This section should read "Visible emission notations of the stack exhausts B-11, B-13, B-14, B-15, and B-25 shall be performed...".

# Response 7:

Stacks which exhaust inside the building are not subject to visible emissions monitoring, however sources sometimes redirect stacks and have them exhaust to the atmosphere. OAQ prefers to state this in the visible emissions monitoring condition, rather than remove specific stacks. In this manner, if the stacks are later redirected to exhaust outside into the atmosphere, no change to the permit is necessary.

Condition D.4.8 (a) has been revised as follows:

# D.4.8 Visible Emissions Notations

(a) Visible emission notations of the stack exhausts B-11 through B-18, B-25 and WR-1 shall be performed once per shift during normal daylight operations when exhausting directly to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

#### Comment 8:

Section D.5.6, paragraph (a) begins "Visible emission notations of the stack exhausts J-1, J-2, J-3, J-4, J-5, J-6, J-7, J-8, J-11, J-12, J-13, J-14, and J-15 shall be performed...".

Two of the stacks cited, B-14 and B-15, exhaust inside the building and should not be subject to visible emissions monitoring. As a result, this section should read "Visible emission notations of the stack exhausts J-1, J-2, J-3, J-4, J-5, J-6, J-7, J-8, J-11, J-12, and J-13 shall be performed...".

# Response 8:

For the same reason expressed in Response 7, IDEM OAQ has elected not to remove specific stacks from the condition, but to modify the condition to apply only when stacks are exhausting to the atmosphere. Condition D.5.6 has been revised as follows:

#### D.5.6 Visible Emissions Notations

(a) Visible emission notations of the stack exhausts J-1, J-2, J-3, J-4, J-5, J-6, J-7, J-8, J-11, J-

12, J-13, J-14 and J-15 shall be performed once per shift during normal daylight operations when exhausting directly to the atmosphere. A trained employee shall record whether

emissions are normal or abnormal.

#### Comment 9:

On June 6, 2002, Michael Spihlman of U.S. Gypsum submitted additional comments on the proposed Part 70 Operating Permit. The comments are as follows: The permit language, if changed, has deleted language as strikeouts and new language **bolded**.

The purpose of this letter is to inform the State of Indiana that there has been a modification to our waste reclaim dust collection system as it relates to our Title V permit # T 089-7532-00333.

As designed and installed, our waste reclaim system includes a shredder, a conveyor belt which transports shredded material into the adjacent synthetic gypsum storage shed, and a retractable discharge spout for the conveyor. As installed and previously permitted, the particulate matter emissions from the system were controlled by a single baghouse, identified as WRBH-1, and exhausted through one stack, identified as WR-1. The two "pickup points" or suction points for the dust collection system were the shredder and the retractable spout. Adjacent to baghouse WRBH-1 was an abandoned but fully functional baghouse identical to baghouse WRBH-1. The abandoned baghouse was previously identified as BBH-2 on our Part 70 operating permit, but was idled as part of construction permit # CP 089-8657-00333.

In efforts to eliminate a dust collector pipe plugging problem with the retractable discharge spout of the belt conveyor, we recently replaced the spout with a newly-designed spout. In doing so, we saw the opportunity to further improve the dust collection on the waste conveyor by using the idled dust collector adjacent to WRBH-1. We subsequently conducted a trial whereby we used the combined dust collection capabilities of the two baghouses to increase the draft from the waste conveyor discharge. In the new configuration, emissions from the shredder portion of the system are controlled by baghouse WRBH-1 and exhausts through stack WR-1, and emissions from the conveyor discharge spout are controlled by the previously idled baghouse. We were pleased with the results of the trial and asked Mr. Richard Massoels of IDEM's Northwest Regional Office to come to our facility to view the modifications and advise us on any needed permit changes. After Mr. Massoels viewed our modifications, he agreed that the system was greatly improved and indicated that he did not feel a construction permit would be necessary because we have not changed the source, only the dust collection capacity. In effect, we've now controlled some additional portion of the emissions from the discharge spout which were previously uncontrolled due to insufficient dust collection capacity. Mr. Massoels advised that we write a letter to IDEM's Permit Section to explain the changes and request an insignificant change to our Part 70 operating permit.

We have identified the new baghouse as WRBH-2 and its associated stack as WR-2. Again, it is identical to WRBH-1 in all aspects - airflow, cloth area, manufacturer, etc. We are requesting that the facility description of this process should be changed to read as follows:

"One (1) waste reclaim shredder, with a maximum throughput of 50 tons per hour, with particulate matter controlled by two (2) baghouses, identified as WRBH-1 and WRBH-2, and exhausting through two (2) stacks, identified as WR-1 and WR-2, respectively"

Along with the facility description, the appropriate changes will also have to be made to the parametric monitoring requirements and any other related permit requirements. At present, we have already incorporated the parametric monitoring requirements into our current system of monitoring. This was verified by Mr. Massoels during a recent general inspection of our facility on June 5, 2002. To reiterate, only the dust collection capacity has changed. There has been no change in the

process.

#### Response 9:

The equipment description for the waste reclaim shredder, found in Sections A.2 and D.4 has been revised as follows:

(v) One (1) waste reclaim shredder, with a maximum throughput of 50 tons per hour, with particulate matter controlled by one (1) two (2) baghouses, identified as WRBH-1 and WRBH-2, and exhausting through one (1) two (2) stacks, identified as WR-1 and WR-2, respectively.

Conditions D.4.2, D.4.4, D.4.6, D.4.8 and D.4.12 have also been revised to include the additional baghouse and stack as follows:

#### D.4.2 Nonattainment Area Particulate Limitation [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations), the PM emissions from the new gypsum wallboard line shall be limited as follows:

(i) PM emissions from the waste wallboard shredder exhausting to stacks WR-1 and WR-2 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).

# D.4.4 New Source Performance Standard [326 IAC 12] [40 CFR 60, Subpart OOO]

Pursuant to 40 CFR 60, Subpart OOO (Nonmetallic Mineral Processing Plants), PM emissions from the waste wallboard shredder exhausting to stacks WR-1 and WR-2 shall not exceed 0.05 grams per dry standard cubic meter (g/dscm) and seven percent (7%) opacity. Any fugitive emissions associated with these facilities shall not exceed ten percent (10%) opacity.

#### D.4.6 Testing Requirements [326 IAC 2-7-6(1),(6)]

(a) Pursuant to CP 089-8657-00333, issued on January 8, 1998, the Permittee shall perform compliance testing for PM from the stucco storage bin exhausting to stack B-11, the dry additive system exhausting to stack B-13, and the end various saws exhausting to stack B-25, and the waste wallboard shredder exhausting to stacks WR-1 and WR-2 within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up. The tests shall be performed in accordance with Section C - Performance Testing and 40 CFR 60.675 (for the waste wallboard shredder).

#### D.4.8 Visible Emissions Notations

(a) Visible emission notations of the stack exhausts B-11 through B-18, B-25, WR-1 and WR-2 shall be performed once per shift during normal daylight operations when exhausting directly to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

#### D.4.12 Record Keeping Requirements

- (a) To document compliance with Condition D.4.3, the Permittee shall maintain records of natural gas throughput to the wet zone kiln and dry zone kiln natural gas burners, the gauging water heater, and the wet end seal and dry end seal natural gas burners.
- (b) To document compliance with Condition D.4.8, the Permittee shall maintain records of visible emission notations of the stack exhausts B-11 through B-18, B-25, and WR-1 and WR-2 once per shift.

Upon further review, the OAQ has decided to make the following changes to the Part 70 Operating Permit: The permit language is changed to read as follows (deleted language appears as strikeouts, new language is **bolded**):

# Change 1:

The equipment descriptions for four (4) processes in the wallboard manufacturing line have been changes to indicate that the stacks exhaust inside the building. These changes were made in Sections A.2 and D.4. The revised descriptions are as follows:

A gypsum wallboard manufacturing line, consisting of the following equipment:

- (c) One (1) (HRA) landplaster feed bin, with a maximum capacity of 20 tons, with particulate matter emissions controlled by one (1) bin vent, identified as BBH-12, and exhausting **inside the building** through one (1) stack, identified as B-12.
- (e) One (1) HRA ball mill, with a maximum throughput of 2400 pounds per hour, with particulate matter controlled by one (1) baghouse, identified as BBH-18, and exhausting **inside the building** through one (1) stack, identified as B-18.
- (g) One (1) additive refill bin (starch), with a maximum capacity of 3 tons, with particulate matter controlled by one (1) baghouse, identified as BBH-16, and exhausting **inside the building** through one (1) stack, identified as B-16.
- (h) One (1) additive refill receiver (vermiculite), controlled by one (1) vacuum receiver, identified as BVH-17, and exhausting **inside the building** through one (1) stack, identified as B-17.

## Change 2:

Condition D.1.6 has been changed to indicate that visible emissions notations shall be required only when stacks are exhausting to the atmosphere. The revised condition is as follows:

#### D.1.6 Visible Emissions Notations

(a) Visible emission notations of the stack exhausts J11, J12, J13 and J16 shall be performed once per shift during normal daylight operations when the associated facilities are in operation and exhausting directly to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

#### Change 3:

Condition D.1.7 has been changed to indicate that parametric monitoring for the baghouses is required at least once per shift, but only when the stacks exhaust to the atmosphere. The revised condition is as follows:

#### D.1.7 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the raw material handling and storage facilities, at least once **per shift** weekly when the associated raw material handling and storage facility is in operation when venting directly to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of 0.5 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

#### Change 4:

Condition D.1.10 has been changed to indicate that recordkeeping for parametric monitoring for the baghouses corresponds to the frequency of the monitoring. The revised condition is as follows:

#### D.1.10 Record Keeping Requirements

- (a) To document compliance with Condition D.1.6, the Permittee shall maintain records of visible emission notations of the baghouse stack exhausts J11, J12, J13 and J16 once per shift.
- (b) To document compliance with Condition D.1.7, the Permittee shall maintain the following:
  - (1) Daily Records of the following operational parameters **taken once per shift** during normal operation when venting **directly** to the atmosphere:

# Change 5:

In Condition D.2.1 (e), the 326 IAC 6-1-2 PM emission limitation for the dryer mills has been revised. The previous limitation of 0.01 grains per dry standard cubic foot (gr/dscf), pursuant to 326 IAC 6-1-2 (b)(3) was only applicable for gaseous fuel-fired steam generators, not natural gas-fired burners. The revised condition, pursuant to 326 IAC 6-1-2 (a), is as follows:

#### D.2.1 Nonattainment Area Particulate Limitation [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations), the PM emissions from landplaster production process shall be limited as follows:

(e) PM emissions from the natural gas-fired burners for dryer mills #1 and #2 exhausting to stacks M-8 and M-12 shall each not exceed **0.03** <del>0.01</del> grains per dry standard cubic foot (gr/dscf).

# Change 6:

Condition D.2.9 has been changed to indicate that visible emissions notations shall be required only when stacks are exhausting to the atmosphere. The revised condition is as follows:

#### D.2.9 Visible Emissions Notations

(a) Visible emission notations of the stack exhausts M-2, M-8, M-12 and M-19 shall be performed once per shift during normal daylight operations **when exhausting directly to the atmosphere**. A trained employee shall record whether emissions are normal or abnormal.

#### Change 7:

Condition D.2.10 has been changed to indicate that parametric monitoring for the baghouses is required at least once per shift, but only when the stacks exhaust to the atmosphere. The revised condition is as follows:

# D.2.10 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the landplaster production process, at least once **per shift** daily when the associated facilities are in operation **when venting directly to the atmosphere**.

#### Change 8:

Condition D.2.13 has been changed to indicate that recordkeeping for parametric monitoring for the baghouses is required at least once per shift. The revised condition is as follows:

#### D.2.13 Record Keeping Requirements

- (a) To document compliance with Condition D.2.4, the Permittee shall maintain records of natural gas throughput to dryer mill #2.
- (b) To document compliance with Condition D.2.9, the Permittee shall maintain records of visible emission notations of the stack exhausts M-2, M-8, M-12 and M-19 once per shift.
- (c) To document compliance with Condition D.2.10, the Permittee shall maintain the following:
  - (1) Daily Records of the following operational parameters **taken once per shift** during normal operation when venting **directly** to the atmosphere:

# Change 9:

In Conditions D.3.1 (c) and (d), the 326 IAC 6-1-2 PM emission limitations for the natural gas-fired burners have been revised. The previous limitation of 0.01 grains per dry standard cubic foot (gr/dscf), pursuant to 326 IAC 6-1-2 (b)(3), was only applicable for gaseous fuel-fired steam generators, not natural gas-fired burners. The revised conditions, pursuant to 326 IAC 6-1-2 (a), is as follows:

# D.3.1 Nonattainment Area Particulate Limitation [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations), the PM emissions from the stucco production process shall be limited as follows:

- (c) PM emissions from the natural gas-fired burners for kettle #2 exhausting to stack M-14 shall not exceed **0.03** <del>0.01</del> grains per dry standard cubic foot (gr/dscf).
- (d) PM emissions from the natural gas-fired burners for kettle #3 exhausting to stack M-6 shall not exceed **0.03** <del>0.01</del> grains per dry standard cubic foot (gr/dscf).

# Change 10:

Condition D.3.7 (b) has been revised to remove references to Conditions D.3.3 and D.3.5. Testing requirements for these conditions are covered by Condition D.3.7 (a).

#### D.3.7 Testing Requirements [326 IAC 2-7-6(1),(6)]

(b) The Permittee is not required to test the remaining stucco production facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the limits specified in Conditions D.3.1 **and** D.3.2, D.3.3 and D.3.5 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

# Change 11:

Condition D.3.9 has been changed to indicate that visible emissions notations shall be required only when stacks are exhausting to the atmosphere. The revised condition is as follows:

# D.3.9 Visible Emissions Notations

(a) Visible emission notations of the stack exhausts M-1, M-2, M-16 and M-8 shall be performed once per shift during normal daylight operations when exhausting directly to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

#### Change 12:

Condition D.3.10 has been changed to indicate that recordkeeping for parametric monitoring for the baghouses is required at least once per shift. The revised condition is as follows:

#### D.3.10 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the stucco production process, at least once **per shift** daily when the associated facilities are in operation **when venting directly to the atmosphere**.

# Change 13:

Condition D.3.13 has been changed to indicate that recordkeeping for parametric monitoring for the baghouses is required at least once per shift. The revised condition is as follows:

#### D.3.13 Record Keeping Requirements

- (a) To document compliance with Condition D.3.4, the Permittee shall maintain records of natural gas throughput to the six (6) natural gas fired burners for calcining kettle #2.
- (b) To document compliance with Condition D.3.9, the Permittee shall maintain records of visible emission notations of the stack exhausts M-1, M-2, M-16 and M-8 once per shift.
- (c) To document compliance with Condition D.3.10, the Permittee shall maintain the following:
  - (1) Daily Records of the following operational parameters taken once per shift during normal operation when venting directly to the atmosphere:

# Change 14:

In Conditions D.4.2 (h) and (i), the 326 IAC 6-1-2 PM emission limitations for the natural gas-fired burners and natural gas-fired water heater have been revised. The previous limitation of 0.01 grains per dry standard cubic foot (gr/dscf), pursuant to 326 IAC 6-1-2 (b)(3), was only applicable for gaseous fuel-fired steam generators, not natural gas-fired burners. The revised conditions, pursuant to 326 IAC 6-1-2 (a), is as follows:

# D.4.2 Nonattainment Area Particulate Limitation [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations), the PM emissions from the new gypsum wallboard line shall be limited as follows:

- (h) PM emissions from the natural gas-fired burners exhausting to stack B-20 shall not exceed **0.03** <del>0.01</del> grains per dry standard cubic foot (gr/dscf).
- (i) PM emissions from the natural gas-fired gauging water heater exhausting to stack B-19 shall not exceed **0.03** <del>0.01</del> grains per dry standard cubic foot (gr/dscf).

# Change 15:

Condition D.4.6 (b) has been revised to remove the reference to Condition D.4.3, which is not applicable.

#### D.4.6 Testing Requirements [326 IAC 2-7-6(1),(6)]

(b) The Permittee is not required to test the remaining wallboard production facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facilities are in compliance. If testing is required by IDEM, compliance with the PM limits specified in Conditions D.4.1 **and** D.4.2 <del>and D.4.3</del> shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

# Change 16:

Condition D.4.9 has been changed to indicate that recordkeeping for parametric monitoring for the baghouses is required at least once per shift. The word new has also been removed from the wallboard production process description. The revised condition is as follows:

#### D.4.9 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the new wallboard production process, at least once daily per shift when the associated facilities are in operation when venting directly to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of 0.5 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

#### Change 17:

Condition D.4.12 has been changed to indicate that recordkeeping for parametric monitoring for the baghouses is required at least once per shift. The revised condition is as follows:

#### D.4.12 Record Keeping Requirements

- (a) To document compliance with Condition D.4.3, the Permittee shall maintain records of natural gas throughput to the wet zone kiln and dry zone kiln natural gas burners, the gauging water heater, and the wet end seal and dry end seal natural gas burners.
- (b) To document compliance with Condition D.4.8, the Permittee shall maintain records of visible emission notations of the stack exhausts B-11 through B-18, B-25, and WR-1 and WR-2 once per shift.
- (c) To document compliance with Condition D.4.9, the Permittee shall maintain the following:
  - (1) Daily Records of the following operational parameters taken once per shift during normal operation when venting directly to the atmosphere:

#### Change 18:

Condition D.5.7 has been changed to indicate that recordkeeping for parametric monitoring for the baghouses is required at least once per shift. The revised condition is as follows:

#### D.5.7 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses used in conjunction

with the joint treatment processes, at least once weekly per shift when the associated facilities are in operation when venting directly to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of 0.5 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

# Change 19:

Condition D.5.10 has been changed to indicate that recordkeeping for parametric monitoring for the baghouses is required at least once per shift. The revised condition is as follows:

#### D.5.10 Record Keeping Requirements

- (a) To document compliance with Condition D.5.6, the Permittee shall maintain records of visible emission notations of the stack exhausts J-1, J-2, J-3, J-4, J-5, J-6, J-7, J-8, J-11, J-12, J-13, J-14 and J-15 once per shift.
- (b) To document compliance with Condition D.5.7, the Permittee shall maintain the following:
  - (1) Daily Records of the following operational parameters **taken once per shift** during normal operation when venting **directly** to the atmosphere:

# Change 20:

Condition D.6.3 has been removed from the permit.

#### D.6.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facilities are in compliance. If testing is required by IDEM, compliance with the PM limits specified in Conditions D.6.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

# Change 21:

The source address on the Certification Form has been changed. The revised address is as follows:

# PART 70 OPERATING PERMIT CERTIFICATION

Source Name: United States Gypsum Company

Source Address: 3501 Canal Street, 301 Riley Road, East Chicago, Indiana 46312 Mailing Address: 3501 Canal Street, 301 Riley Road, East Chicago, Indiana 46312

Part 70 Permit No.: T089-7532-0033

# Indiana Department of Environmental Management Office of Air Quality

# Technical Support Document (TSD) for a Part 70 Significant Permit Modification

#### **Source Background and Description**

Source Name: United States Gypsum Company

Source Location: 301 Riley Road, East Chicago, Indiana 46312

County: Lake SIC Code: 3275

Operation Permit No.: T 089-7532-00333
Operation Permit Issuance Date: July 6, 1999

Significant Permit Modification No.: SPM 089-11767-00333
Permit Reviewer: Patrick Brennan

The Office of Air Quality (OAQ) has reviewed a significant permit modification application from the United States Gypsum Company relating to the operation of its gypsum wallboard, joint compound and dry paint manufacturing source.

#### **History**

On January 13, 2000, the United States Gypsum Company submitted an application to the OAQ requesting to remove the stack testing requirement in their Part 70 permit for the waste reclaim shredder and the #1 ready mix hopper. They also requested that several changes be made to the Part 70 permit to reflect current operations. These changes were to correct minor errors in the capacity and throughput of the various production facilities, which are primarily the result of differences between the final "as built" configuration of the source, and the preliminary engineering designs.

All emissions calculations in the Part 70 permit from sources controlled by baghouses were based upon the outlet grain loading of each baghouse. These outlet grain loadings are unchanged, and in most cases are subject to stack testing. Therefore, an increase in capacity or throughput at a baghouse controlled emission unit does not constitute an increase in potential emissions.

The source also requested that equipment that was no longer in use and has been demolished be removed from the permit.

On March 16, 2000, a meeting was held at IDEM between the source and representatives of the OAQ Permitting and Compliance Data (stack testing) sections. At that meeting, it was determined that the stack testing requirement for the waste wallboard shredder could be removed from the Part 70 permit, but that stack testing would continue to be required at the #1 ready mix hopper. At that meeting it was also discussed that the Part 70 permit stated that stack testing for the waste reclaim shredder was required by CP 089-8657-00333. The waste reclaim shredder was not a part of CP 089-8657-00333, and there was some question at the time whether this may be an unpermitted facility. Subsequent investigation has revealed that the waste reclaim shredder was permitted under CP 089-7755-00333.

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East Chicago, Indiana Permit Modification No.: 089-11767-00333

Permit Reviewer: Pat Brennan/MES

During the review process it was discovered that the natural gas throughput limits for natural gas fired facilities permitted under CP-089-8657-00333, issued on January 8, 1998, were not included in the Part 70 permit. These limits are necessary for emission offset minor status for  $NO_X$  emissions, and have been added to the permit as part of this permit revision.

On October 15, 2001, the applicant submitted additional changes regarding specific differential pressure ranges for the baghouses, and changing the stack designation for the cut-back saw, which have been incorporated into this modification.

#### **Permit Modification**

Pursuant to 326 IAC 2-7-12(d), a significant modification to the Part 70 permit is required because the elimination of the stack testing requirement for the waste reclaim shredder constitutes a significant change in existing monitoring conditions. The following are the proposed changes to the Part 70 permit, along with the rationale for each change(deleted language appears as strikeouts, new language appears in bold).

- 1. As of January 1, 2001, the name of the Office of Air Management (OAM) has been changed to the Office of Air Quality (OAQ). All references in the permit to OAM have been changed to OAQ.
- 2. The plant address was stated incorrectly on the cover page of the permit. The correct address is as follows:

# United States Gypsum Company 3501 Canal Street 301 Riley Road East Chicago, Indiana 46312

3. The expiration has been added to the signature box. The expiration is exactly 5 years after the issuance date.

Operation Permit No.: T089-7532-00333	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: July 6, 1999  Expiration Date: July 6, 2004

# 4. Changes to the Emission Units Equipment List, Section A.2

The following changes have been made to the equipment list. The rationale for and implications of each changed will be discussed in Section D for each item.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

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East Chicago, Indiana Permit Modification No.: 089-11767-00333

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Raw material handling and storage, consisting of the following equipment:

(a) One (1) pneumatic rail car unloading facility, with a maximum throughput of 24,000 pounds per hour, used for limestone, hydrocal, and mica, with particulate matter emissions controlled by each individual baghouse identified as JBH-11, JBH-12 and JBH-13, and exhausting through each respective stack identified as J-11, J-12 and J-13 respectively. one (1) baghouse, identified as JVH10, and exhausting through one (1) stack, identified as J10.

- (b) One (1) pneumatic truck unloading facility, with a maximum throughput of 22,000 pounds per hour, used for perlite, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-16, and exhausting through one (1) stack, identified as J-16.
- (c) One (1) limestone storage silo, with a maximum capacity of 330 tons, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-11, and exhausting through one (1) stack, identified as J-11.
- (d) One (1) hydrocal storage silo, with a maximum capacity of 140 tons, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-12, and exhausting through one (1) stack, identified as J-12.
- (e) One (1) mica storage silo, with a maximum capacity of 60 tons, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-13, and exhausting through one (1) stack, identified as J-13.
- (f) One (1) perlite storage silo, with a maximum capacity of 250 tons, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-16, and exhausting through one (1) stack, identified as J-16.
- (g) One (1) enclosed rock shed, with a maximum capacity of 125,000 tons.—with a transfer vacuum receiver, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-20, and exhausting inside the shed.
- (h) One (1) synthetic gypsum stockpile, identified as F-1, with fugitive particulate matter emissions exhausting directly to the atmosphere.

A landplaster production process, consisting of the following equipment:

- (a) A conveying system, consisting of belt and screw conveyors, with particulate matter emissions controlled by partial or total enclosure, and exhausting to associated processes or directly to the atmosphere. Some portions of the conveyor system are controlled by one (1) baghouse, identified as MBH-2, and exhausting through one (1) stack, identified as M-2. either of two (2) baghouses, identified as MBH-8 and MBH-10, and exhausting through either of two (2) stacks, identified as M-7 and M-13, respectively.
- (b) One (1) dryer mill bin #1, with a maximum capacity of 60 tons and a throughput of 40 tons per hour, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.
- (c) One (1) dryer mill bin #2, with a maximum capacity of 60 tons and a throughput of 40 tons per hour, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.
- (d) One (1) dryer mill #1, with a maximum throughput of 35 tons per hour, with particulate

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East Chicago, Indiana Permit Modification No.: 089-11767-00333

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matter emissions controlled by one (1) baghouse, identified as MBH-8, and exhausting through one (1) stack, identified as **M-8** M-7.

- (e) One (1) natural gas-fired burner for the dryer mill #1, with a heat input capacity of 20 MMBtu per hour, and exhausting through one (1) stack, identified as M-8.
- (f) One (1) screening station #1, with a maximum throughput of 35 tons per hour, with particulate matter emissions controlled by **one (1) baghouse**, **identified as MBH-8**, **and exhausting through one (1) stack**, **identified as M-8**. total enclosure, and exhausting to drver mill #1.
- (g) One (1) dryer mill #2, with a maximum throughput of 35 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as **MBH-12** <del>MBH-10</del>, and exhausting through one (1) stack, identified as **M-12** <del>M-13</del>.
- (h) One (1) natural gas-fired burner for the dryer mill #2, with a heat input capacity of 20 MMBtu per hour, and exhausting through one (1) stack, identified as M-12.
- (i) One (1) screening station #2, with a maximum throughput of 35 tons per hour, with particulate matter emissions controlled by one (1) baghouse identified as MBH-12, and exhausting through one (1) stack, identified as M-12. total enclosure, and exhausting to dryer mill #2.
- (j) One (1) mill landplaster bin, with a maximum capacity of 20 tons, with particulate matter controlled by one (1) baghouse, identified as MBH-19, and exhausting through one stack, identified as M-19.

A stucco production process, consisting of the following equipment:

- (a) One (1) kettle feed bin #2, with a maximum capacity of 60 tons, with particulate matter emissions controlled by one (1) baghouse, identified as **MBH-8** MBH-18, and exhausting through one (1) stack, identified as **M-8** M-18.
- (b) One (1) calcining kettle #2, with a maximum throughput of **45** <del>30</del> tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as **MBH-16** <del>MBH-11</del> MBH-14, and exhausting through one (1) stack, identified as M-16.
- (c) Six (6) natural-gas fired burners for the calcining kettle #2, each with a heat input capacity of 5 MMBtu per hour, and exhausting through one (1) stack, identified as **M-14** M-15.
- (d) One (1) kettle feed bin #3, with a maximum capacity of 60 tons, with particulate matter emissions controlled by one (1) baghouse, identified as **MBH-8** MBH-13, and exhausting through one (1) stack, identified as **M-8** M-18.
- (e) One (1) calcining kettle #3, with a maximum throughput of 30 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-1, and exhausting through one (1) stack, identified as M-1.
- (f) One (1) natural-gas fired burner for the calcining kettle #3, with a heat input capacity of **15** 20 MMBtu per hour, and exhausting through one (1) stack, identified as M-6.
- (g) One (1) hot pit #3, with a maximum throughput of 30 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as **MBH-1** <del>MBH-3</del>, and exhausting through one (1) stack, identified as **M-1** <del>M-3</del>.

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(h) A conveying system, with a maximum throughput of 70 30 tons per hour, with particulate matter emissions controlled by partial or total enclosure, and exhausting to associated processes or directly to the atmosphere. Some portions of the conveyor system are controlled by one (1) baghouse, identified as MBH-2 MBH-13, and exhausting through one (1) stack, identified as M-2 M-18.

(i) One (1) stucco storage bin, with a maximum capacity of 50 tons, with particulate matter controlled by one (1) baghouse, identified as MBH-2, and exhausting through one (1) stack, identified as M-2.

An existing gypsum wallboard manufacturing line, consisting of the following equipment:

- (a) An elevating and conveying system, with a maximum throughput of 30 tons per hour, with particulate matter emissions controlled by partial or total enclosure, and exhausting to associated processes or directly to the atmosphere. Some portions of the conveyor system are controlled by one (1) baghouse, identified as MBH-2, and exhausting through one (1) stack, identified as M-2.
- (b) One (1) stucco screen, with a maximum throughput of 32 tons per hour, with particulate matter controlled by one (1) bin vent, identified as MBH-9, and exhausting through one (1) stack, identified as M-9.
- (c) Two (2) stucco storage bins, with particulate matter emissions controlled by one (1) bin vent, identified as MBH-9, and exhausting through one (1) stack, identified as M-9.
- (d) One (1) paper fiber mill with cyclone separator, with a maximum throughput of 200 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-1, and exhausting through one (1) stack, identified as B-1.
- (e) Four (4) dry additive storage bins with hopper feeders, each with a maximum capacity of 5 tons, with all particulate matter emissions controlled by one (1) baghouse, identified as BB-1, and all exhausting to one (1) stack, identified as BB-1.
- (f) One (1) manually fed dry additive hopper feeder, with particulate matter emissions uncontrolled, and exhausting inside the building.
- (g) One (1) HRA mill additive bin with hopper feeder, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-7, and exhausting inside the building.
- (h) One (1) manually fed HRA mill hopper feeder, with particulate matter emissions uncontrolled, and exhausting inside the building.
- (i) One (1) HRA ball mill, with a maximum throughput of 1620 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-8, and exhausting inside the building.
- (j) One (1) dry mixing screw conveyor, with a maximum throughput of 60 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-1, and exhausting through one (1) stack, identified as B-1.
- (k) One (1) wet mixer, with a maximum throughput of 80 tons per hour, with particulate matter emissions uncontrolled, and exhausting inside the building.

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(I) Three (3) wallboard drying kiln burners, each with a heat input capacity of 22.7 million Btu per hour, with emissions uncontrolled, and exhausting in the kiln.

- (m) One (1) wallboard drying kiln, with a maximum throughput of 32,400 square feet of wallboard per hour, with emissions uncontrolled, and exhausting through three (3) stacks, identified as B-4, B-5 and B-6.
- (n) One (1) end saw, with a maximum throughput of 32,400 square feet of wallboard per hour, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-2, and exhausting through one (1) stack, identified as B-2.

A-new gypsum wallboard manufacturing line, consisting of the following equipment:

- (a) One (1) stucco storage bin, with a maximum capacity of 1200 tons, with particulate matter controlled by one (1) bin vent, identified as BBH-11, and exhausting through one (1) stack, identified as B-11.
- (b) One (1) stucco surge bin with hopper, with a maximum capacity of 2 tons, with particulate matter controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
- (c) One (1) **(HRA)** landplaster feed bin, with a maximum capacity of **20** 5 tons, with particulate matter emissions controlled by one (1) bin vent, identified as BBH-12, and exhausting through one (1) stack, identified as B-12.
- (d) One (1) HRA mill additive bin (sugar), with a maximum capacity of 10-6 cubic feet, feeding the HRA ball mill, with particulate matter emissions uncontrolled, controlled by one (1) bin vent, identified as MBH-19, and exhausting inside the building.
- (e) One (1) HRA ball mill, with a maximum throughput of 2400 pounds per hour, with particulate matter controlled by one (1) baghouse, identified as **BBH-18**, <del>BBH-14</del>, and exhausting through one (1) stack, identified as B-18.
- (f) One (1) HRA bin, with a maximum capacity of 3 tons, with particulate matter controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
- (g) One (1) additive refill bin (starch), with a maximum capacity of 3 tons, with particulate matter controlled by one (1) baghouse, identified as BBH-16, and exhausting through one (1) stack, identified as B-16.
- (h) One (1) additive refill receiver (vermiculite), controlled by one (1) vacuum receiver, identified as BVH-17, and exhausting through one (1) stack, identified as B-17.
- (i) Two (2) additive bulk storage bins (starch and vermiculite), each with a maximum capacity of 75 tons, with particulate matter emissions controlled by two (2) separate baghouses, identified as BBH-14 (starch) and BBH-15 (vermiculite), and all exhausting to two (2) respective stacks, identified as B-14 and B-15.
- (j) One (1) additive surge bin (vermiculite), with a maximum capacity of 5 tons, with particulate matter controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
- (g) Two (2) additive storage bin vacuum receivers, each with particulate matter emissions

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controlled by one (1) baghouse, identified as BVH-1 and BVH-2, and each exhausting to one (1) stack, identified as B-14 and B-15, respectively.

- (h) Two (2) additive refill vacuum receivers, each with particulate matter emissions controlled by one (1) baghouse, identified as BVH-3 and BVH-4, and each exhausting to one (1) stack, identified as B-16 and B-17, respectively.
- (i) Two (2) additive bulk storage bins, each with a maximum capacity of 75 tons, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-13, and all exhausting to one (1) stack, identified as B-13.
- (j) Two (2) additive surge storage bins, each with a maximum capacity of 5 tons, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-13, and all exhausting to one (1) stack, identified as B-13.
- (k) One (1) glass fiber additive bin, with a maximum capacity of **six (6) cubic feet** <del>0.5 ton</del>, with particulate matter emissions uncontrolled, and exhausting inside the building.
- (I) One (1) paper fiber mill with cyclone separator, with a maximum throughput of **900** <del>200</del> pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
- (m) One (1) mixing screw conveyor, with a maximum throughput of 60 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
- (n) One (1) natural gas-fired gauging water heater, with a heat input capacity of 3.5 MMBtu per hour, and exhausting through one (1) stack, identified as B-19.
- (o) One (1) wet mixer, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
- (p) One (1) wet zone kiln natural gas-fired burner, with a heat input capacity of **67** 66 MMBtu per hour, and exhausting through one (1) stack, identified as B-20.
- (q) One (1) dry zone kiln natural gas-fired burner, with a heat input capacity of **67** 66 MMBtu per hour, and exhausting through one (1) stack, identified as **B-20** B-21.
- (r) One (1) wet end seal natural gas-fired burner, with a heat input capacity of **2.5** <del>1.5</del> MMBtu per hour, and exhausting through one (1) stack, identified as **B-20** <del>B-21</del>.
- (s) One (1) dry end seal natural gas-fired burner, with a heat input capacity of **2.5** <del>1.5</del> MMBtu per hour, and exhausting through one (1) stack, identified as **B-20** <del>B-21</del>.
- (t) One (1) wallboard drying kiln, with a maximum throughput of **78,000** 32,400 square feet of wallboard per hour, and exhausting through one (1) main stack, identified as **B-20** B24.—A portion of the exhaust is sent through a heat exchanger which exhausts through one (1) stack, identified as B27.
- (u) One (1) end saw, with a maximum throughput of **78,000** 32,400 square feet of wallboard per hour, with particulate matter emissions controlled by one (1) baghouse, identified as **BBH-25** BBH15, and exhausting through one (1) stack, identified as B-25.
- (v) One (1) waste reclaim shredder, with a maximum throughput of 50 tons per hour, with

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particulate matter controlled by one (1) baghouse, identified as WRBH-1, and exhausting through one (1) stack, identified as WR-1.

(w) One (1) existing cut-back saw, with particulate matter controlled by one (1) baghouse, identified as BBH-25, and exhausting through one (1) stack, identified as B-25.

A joint treatment process, consisting of the following equipment:

- (a) A pneumatic conveying system from the bulk storage **silos** bins to the scale hoppers, with particulate matter emissions controlled by three (3) baghouses, identified as JBH-11, JBH-12 and JBH-13, and exhausting through three (3) stacks, identified as J-11, J-12 and J-13, respectively.
- (b) Four (4) scale hoppers, with particulate matter emissions uncontrolled, and exhausting inside the building.
- (c) A ready-mix line, consisting of the following equipment:
  - (1) Two (2) holding hoppers, each with a maximum throughput of 5 tons per hour, each with particulate matter emissions controlled by two (2) baghouses, one (1) baghouse, identified as JBH-1 and JBH-2, and each exhausting through two (2) stacks one (1) stack, identified as J-1 and J-2, respectively.
  - (2) One (1) dry additives bag dump, with a maximum throughput of 1176 pounds per hour, with particulate matter controlled by three (3) baghouses, identified as JBH-1, JBH-2 and JVH-3, and exhausting through three (3) stacks, identified as J-1, J-2 and J-3, respectively.
  - (3) Two (2) wet mixers, each with a maximum throughput of 7.25 tons per hour, and exhausting inside the building.
- (d) A dry joint compound line, consisting of the following equipment:
  - (1) One (1) dry additives bag dump, with a maximum throughput of 600 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JVH-8, and exhausting through one (1) stack, identified as J-8.
  - One (1) reclaim screw conveyor, with a maximum throughput of 1,184 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-7, and exhausting through one (1) stack, identified as J-7.
  - One (1) dry joint mixer, with a maximum throughput of 5,678 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-7, and exhausting through one (1) stack, identified as J-7.
  - (4) One (1) packing machine, with a maximum throughput of 5,100 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-14, and exhausting inside the building **through stack J-14.**
- (e) A dry texture paint line, consisting of the following equipment:
  - (1) One (1) dry additives bag dump, with a maximum throughput of 390 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified

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as JBH-5 JVH-6, and exhausting through one (1) stack, identified as J-5 J-6.

- (2) One (1) reclaim screw conveyor, with maximum throughput of 502 pounds per hour, and a polystyrene screw conveyor, with a maximum capacity of 75 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-4, and exhausting through one (1) stack, identified as J-4.
- One (1) dry texture paint mixer, with a maximum throughput of 4650 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-4, and exhausting through one (1) stack, identified as J-4.
- (4) One (1) packing machine, with a maximum throughput of 4650 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-4, and exhausting through one (1) stack, identified as J-4.
- (5) One (1) dry paint weigh station, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-15, and exhausting through one (1) stack, identified as J-15 JV-19.
- (6) One (1) dry additive conveying system, with a maximum throughput of 400 pounds per hour, with particulate emissions controlled by one (1) vacuum receiver, identified as JVH-6, and exhausting through one (1) stack, identified as J-6.

A Franklin Fiber process, consisting of the following equipment:

- (a) Two (2) wet mixing tanks, with a combined maximum throughput of 1535 pounds per hour, with particulate matter emissions controlled by moisture content, and exhausting inside the building.
- (b) One (1) reactor chamber using boiler steam, with particulate matter emissions controlled by moisture content, and exhausting inside the building.
- (c) One (1) filter using boiler heat to start drying process, with particulate matter emissions uncontrolled, and exhausting inside the building.
- (d) One (1) lump breaker and natural gas-fired dryer, with a heat input capacity of 3 MMBtu per hour and maximum throughput of 1535 pounds per hour, with particulate matter emissions controlled by two (2) baghouses, identified as MBH-6 and MBH-7, and exhausting through one (1) stacks, identified as M6.
- (e) One (1) drop out box, with a maximum throughput of 8 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-6, and exhausting through one (1) stack, identified as M-6.

#### 5. Changes to the Insignificant Activities List, Section A.3

The following changes are the result of the two natural gas fired boilers being removed from service.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically

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regulated, as defined in 326 IAC 2-7-1(21):

(a) One (1) natural gas-fired boiler, with a heat input capacity of 8.4 million Btu per hour, with emissions uncontrolled, and exhausting through one (1) stack, identified as M-3.

- (b) One (1) natural gas-fired boiler, with a heat input capacity of 3.4 million Btu per hour, with emissions uncontrolled, and exhausting through one (1) stack, identified as M-4.
- (a) (c) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- **(b)** (d) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (c) (e) One (1) landplaster baler, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.
- (d) (f) A polypropylene bag grinding process, consisting of the following equipment:
  - (1) A bag storage and conveying system, with two (2) bins and two (2) screw conveyors, with negligible emissions, and exhausting inside the building.
  - (2) Two (2) polypropylene bags grinding machines, each with a maximum throughput of 20 pounds per hour, with particulate matter emissions controlled by partial enclosure, and exhausted to the ground polypropylene bins.
  - (3) Three (3) ground polypropylene bins with screens, with a combined maximum capacity of 360 cubic feet, with particulate matter emissions uncontrolled, and exhausting inside the building.
  - (4) One (1) weigh feeder, with a maximum throughput of 47 pounds per hour, with particulate matter emissions uncontrolled, and exhausting inside the building.

# 6. Changes to Section B.9

Condition B.9 (Compliance with Permit Conditions) has been revised to clarify that noncompliance with any requirement of this permit may result in an enforcement action against the Permittee, an action to modify, revoke, reissue or terminate the source's permit, and/or a denial of the Permittee's application to renew the permit. In addition, except for those permit conditions that are not federally enforceable, noncompliance is also a violation of the federal Clean Air Act as follows:

#### B.9 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit constitutes a violation of the Clean Air Act and is grounds for:
  - (1) Enforcement action;
  - (2) Permit termination, revocation and reissuance, or modification; or
  - (3) Denial of a permit renewal application.
- (b) Noncompliance with any provisions of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the

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#### Clean Air Act.

(c) (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(d) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B. Emergency Provisions.

#### 7. Changes to Section B.11

Condition B.11 (Annual Compliance Certification) paragraph (a) has been revised to clarify that the initial certification is from the date of issuance until December 31. Paragraph (c) has been revised so that it matches the language in the rule. In addition, OAQ has decided that although the authority exists, it may be cumbersome for the source to list all insignificant activities in the annual compliance certification, so the requirement is being deleted from the permit.

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent The certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was <del>based on</del> continuous or intermittent <del>data</del>;

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- (4) The methods used for determining **the** compliance **status** of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); **and**
- (5) Any insignificant activity that has been added without a permit revision; and
- (6)(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

# 8. Changes to Section D.1.

The rail car unloading process has been modified from a two-step to a one-step process. The rail cars were previously emptied using a vacuum process, and the raw materials were subsequently blown into storage silos. The rail cars are now air tight, which allows the raw materials to be blown directly from the rail cars into the storage silos. Emissions from the vacuum process were previously exhausted through stack S-10. Because this process no longer exists, it has been removed from the permit. Emissions from the entire raw material handling process are governed by 326 IAC 6-1-10.1 (Nonattainment Area Particulate Limitations). U.S. Gypsum has stated that the direct unloading of the raw materials into the storage silos results in no additional emissions during the unloading process, and that the specific emission limitations for stacks J-11, J-12 and J-13 that are found in 326 IAC 6-1-10.1 are still valid and attainable.

In addition, the visible emissions monitoring frequency in Condition D.1.6 has been changed from daily to once per shift, and the pressure drop range in Condition D.1.7 has been changed to between 0.5 and 6.0 inches of water.

The specific changes to Section D.1 are as follows:

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#### **SECTION D.1 FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]

Raw material handling and storage, consisting of the following equipment:

One (1) pneumatic rail car unloading facility, with a maximum throughput of 24,000 pounds per (a) hour, used for limestone, hydrocal, and mica, with particulate matter emissions controlled by each individual baghouse identified as JBH-11, JBH-12 and JBH-13, and exhausting through each respective stack identified as J-11, J-12 and J-13 respectively. one (1) baghouse, identified as JVH10, and exhausting through one (1) stack, identified as J10.

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- (b) One (1) pneumatic truck unloading facility, with a maximum throughput of 22,000 pounds per hour, used for perlite, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-16, and exhausting through one (1) stack, identified as J-16.
- (c) One (1) limestone storage silo, with a maximum capacity of 330 tons, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-11, and exhausting through one (1) stack, identified as J-11.
- (d) One (1) hydrocal storage silo, with a maximum capacity of 140 tons, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-12, and exhausting through one (1) stack, identified as J-12.
- One (1) mica storage silo, with a maximum capacity of 60 tons, with particulate matter (e) emissions controlled by one (1) baghouse, identified as JBH-13, and exhausting through one (1) stack, identified as J-13.
- (f) One (1) perlite storage silo, with a maximum capacity of 250 tons, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-16, and exhausting through one (1) stack, identified as J-16.
- One (1) enclosed rock shed, with a maximum capacity of 125,000 tons. with a transfer vacuum (g) receiver, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-20, and exhausting inside the shed.
- (h) One (1) synthetic gypsum stockpile, identified as F-1, with fugitive particulate matter emissions exhausting directly to the atmosphere.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

# Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.1.1 Nonattainment Area Particulate Limitation [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations), the PM emissions from the truck unloading facility exhausting to stack J16 and from the transfer vacuum receiver each shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).

# Lake County PM<sub>10</sub> Emission Requirements [326 IAC 6-1-10.1]

Pursuant to 326 IAC 6-1-10.1 (Lake County PM<sub>10</sub> Emission Requirements), the PM<sub>10</sub> emissions shall be limited as follows: from the storage and conveying facilities exhausting to stacks J11, J12 and J13 shall each not exceed 0.015 grains per dry standard cubic foot and 0.190 United States Gypsum Company

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# pounds per hour.

- (a) PM<sub>10</sub> emissions from the rail car unloading facility exhausting to stack J10 shall not exceed 0.010 grains per dry standard cubic foot and 0.070 pounds per hour.
- (b) PM<sub>10</sub> emissions from the storage and conveying facilities exhausting to stacks J11, J12 and J13 shall each not exceed 0.015 grains per dry standard cubic foot and 0.190 pounds per hour.

# D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

# **Compliance Determination Requirements**

# D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM and PM<sub>10</sub> limits specified in Conditions D.1.1 and D.1.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### D.1.5 Particulate Matter (PM)

Pursuant to OP-45-07-93-0520, issued on December 19, 1989, the baghouses for PM control shall be in operation at all times when the associated raw material handling and storage facility is in operation.

#### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.1.6 Visible Emissions Notations

- (a) Daily Visible emission notations of the stack exhausts J10, J11, J12, J13 and J16 shall be performed once per shift during normal daylight operations when the associated facilities are in operation. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

#### D.1.7 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the raw material handling and storage facilities, at least once weekly when the associated raw material handling and storage facility is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop

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across the baghouses shall be maintained within the range of 2.0 0.5 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

#### D.1.8 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the raw material handling and storage facilities. All defective bags shall be replaced.

#### D.1.9 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

# Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

#### D.1.10 Record Keeping Requirements

- (a) To document compliance with Condition D.1.6, the Permittee shall maintain records of daily visible emission notations of the baghouse stack exhausts J10, J11, J12, J13 and J16 once per shift.
- (b) To document compliance with Condition D.1.7, the Permittee shall maintain the following:
  - (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:
    - (A) Inlet and outlet differential static pressure; and
    - (B) Cleaning cycle: frequency and differential pressure.
  - (2) Documentation of all response steps implemented, per event .
  - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
  - (4) Quality Assurance/Quality Control (QA/QC) procedures.

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- (5) Operator standard operating procedures (SOP).
- (6) Manufacturer's specifications or its equivalent.
- (7) Equipment "troubleshooting" contingency plan.
- (8) Documentation of the dates vents are redirected.
- (c) To document compliance with Condition D.1.8, the Permittee shall maintain records of the results of the inspections required under Condition D.1.8.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

#### 8. Changes to Section D.2

Section D.2 has been changed to correct inconsistencies in stack and baghouse identifications. The conveying system is now controlled by baghouse MBH-2 and stack M-2, which has a stack specific emission limit in 326 IAC 6-1-10.1 (Nonattainment Area Particulate Limitations). Condition D.2.2 has been added to enforce this limit.

The visible emissions monitoring frequency in Condition D.2.9 has been changed from daily to once per shift, and the pressure drop range in Condition D.2.10 has been changed to values specific for each baghouse.

The natural gas throughput limit for dryer mill #2, which was contained in CP-089-8657-00333, issued on January 8, 1998, was left out of the Part 70 permit. This limit has also been added as Condition D.2.4, and has been changed from a monthly limit to a twelve (12) consecutive month period limit. The addition of the throughput limit also results in the addition of a quarterly reporting form at the end of the permit, and the addition of Condition D.2.14 for reporting requirements.

As a result of these new conditions, all subsequent D.2 sections have been renumbered. A landplaster storage bin was also added to the equipment list for this section.

The specific changes to Section D.2 are as follows:

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#### **FACILITY OPERATION CONDITIONS** SECTION D.2

Facility Description [326 IAC 2-7-5(15)]

A landplaster production process, consisting of the following equipment:

- A conveying system, consisting of belt and screw conveyors, with particulate matter emissions (a) controlled by partial or total enclosure, and exhausting to associated processes or directly to the atmosphere. Some portions of the conveyor system are controlled by one (1) baghouse, identified as MBH-2, and exhausting through one (1) stack, identified as M-2. either of two (2) baghouses, identified as MBH-8 and MBH-10, and exhausting through either of two (2) stacks, identified as M-7 and M-13, respectively.
- One (1) dryer mill bin #1, with a maximum capacity of 60 tons and a throughput of 40 tons per (b) hour, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.
- (c) One (1) dryer mill bin #2, with a maximum capacity of 60 tons and a throughput of 40 tons per hour, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.
- (d) One (1) dryer mill #1, with a maximum throughput of 35 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-8, and exhausting through one (1) stack, identified as M-8 M-7.
- One (1) natural gas-fired burner for the dryer mill #1, with a heat input capacity of 20 MMBtu (e) per hour, and exhausting through one (1) stack, identified as M-8.
- (f) One (1) screening station #1, with a maximum throughput of 35 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-8, and exhausting through one (1) stack, identified as M-8. total enclosure, and exhausting to dryer mill #1.
- (g) One (1) dryer mill #2, with a maximum throughput of 35 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-12 MBH-10, and exhausting through one (1) stack, identified as M-12 M-13.
- One (1) natural gas-fired burner for the dryer mill #2, with a heat input capacity of 20 MMBtu (h) per hour, and exhausting through one (1) stack, identified as M-12.
- (i) One (1) screening station #2, with a maximum throughput of 35 tons per hour, with particulate matter emissions controlled by one (1) baghouse identified as MBH-12, and exhausting through one (1) stack, identified as M-12. total enclosure, and exhausting to dryer mill #2.
- (j) One (1) mill landplaster bin, with a maximum capacity of 20 tons, with particulate matter controlled by one (1) baghouse, identified as MBH-19, and exhausting through one stack, identified as M-19.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

# Emission Limitations and Standards [326 IAC 2-7-5(1)]

## Nonattainment Area Particulate Limitation [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations), the PM emissions from landplaster production process shall be limited as follows:

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(a) PM emissions from dryer mill #1 and associated screen exhausting to stack **M-8** M-7 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).

- (b) PM emissions from dryer mill #2 and associated screen exhausting to stack **M-12** M-13 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (c) PM emissions from the landplaster bin exhausting to stack M-19 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (d) PM emissions from the conveying system exhausting to stack M-2 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (e) (c) PM emissions from the natural gas-fired burners for dryer mills #1 and #2 exhausting to stacks M-8 and M-12 shall each not exceed 0.01 grains per dry standard cubic foot (gr/dscf).

#### D.2.2 Lake County PM<sub>10</sub> Emission Requirements [326 IAC 6-1-10.1]

Pursuant to 326 IAC 6-1-10.1 (Lake County PM<sub>10</sub> Emission Requirements), the PM<sub>10</sub> emissions from the landplaster conveying facility exhausting from stack M-2 shall not exceed 0.015 grains per dry standard cubic foot and 2.21 pounds per hour.

# D.2.3 D.2.2 Emission Offset Minor PM Limit [326 IAC 2-3]

Pursuant to CP-089-8657-00333, issued on January 8, 1998, the PM emissions from dryer mill #2 and associated screen exhausting to stack **M-12** M-13 shall not exceed 0.010 grains per dry standard cubic foot. Compliance with this limit makes 326 IAC 2-3 (Emission Offset) not applicable. Compliance with this limit will also satisfy the requirements of 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations).

#### D.2.4 Emission Offset Minor NO<sub>x</sub> Limit [326 IAC 2-3]

Pursuant to CP-089-8657-00333, issued on January 8, 1998, natural gas throughput to the natural gas fired burner for dryer mill #2, exhausting to stack M-12, shall not exceed 172.8 million cubic feet per consecutive twelve (12) month period.

Compliance with this limits will assure that the  $NO_X$  emissions from the facilities permitted under CP-089-8657-00333, issued on January 8, 1998, shall remain less than twenty-five (25) tons per year and that the requirements of 326 IAC 2-3 are not applicable.

#### D.2.5 D.2.3 New Source Performance Standard [326 IAC 12] [40 CFR 60, Subpart OOO]

Pursuant to 40 CFR 60, Subpart OOO (Nonmetallic Mineral Processing Plants), PM emissions from the dryer mill #2 and associated screen exhausting to stack **M-12** M-13 shall not exceed 0.05 grams per dry standard cubic meter (g/dscm) and seven percent (7%) opacity. Any fugitive emissions associated with these facilities shall not exceed ten percent (10%) opacity.

#### **D.2.6** D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

#### **Compliance Determination Requirements**

# **D.2.7** D.2.5 Testing Requirements [326 IAC 2-7-6(1),(6)]

(a) Pursuant to CP 089-8657-00333, issued on January 8, 1998, the Permittee shall perform compliance testing for PM from the dryer mill #2 and associated screen exhausting to stack **M-12** M-13 within 60 days after achieving maximum production rate, but no later

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than 180 days after initial start-up. The tests shall be performed in accordance with Section C - Performance Testing and 40 CFR 60.675.

(b) The Permittee is not required to test the dryer mill #1 and associated screen exhausting to stack M-8 M-7 by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limits specified in Conditions D.2.1, D.2.3 D.2.2 and D.2.4 D.2.3 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

### D.2.8 D.2.6 Particulate Matter (PM)

Pursuant to OP 45-07-93-0510, issued on December 19, 1989, and CP-089-8657-00333, issued on January 8, 1998, the baghouses for PM control shall be in operation at all times when the associated facilities are in operation.

# Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### **D.2.9** D.2.7 Visible Emissions Notations

- (a) Daily Visible emission notations of the stack exhausts M-2, M-8, M-12 and M-19 M-7 and M-13 shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

# D.2.10 D.2.8 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the landplaster production process, at least once daily when the associated facilities are in operation.

- (a) Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses **MBH-2** and **MBH-19** shall be maintained within the range of **0.5** <del>2.0</del> and 6.0 inches of water, or a range established during the latest stack test.
- (b) Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses MBH-8 and MBH-12 shall be maintained within the range of 2.0 and 8.0 6.0 inches of water, or a range established during the latest stack test.

The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned ranges for any one reading.

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The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

#### D.2.11 D.2.9 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the landplaster production process. All defective bags shall be replaced.

# D.2.12 D.2.10 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

#### **D.2.13** D.2.11 Record Keeping Requirements

- (a) To document compliance with Condition D.2.4, the Permittee shall maintain records of natural gas throughput to dryer mill #2.
- (b) (a) To document compliance with Condition D.2.9 D.2.7, the Permittee shall maintain records of daily visible emission notations of the stack exhausts M-2, M-8, M-12 and M-19 once per shift. M-7 and M-13
- (c) (b) To document compliance with Condition **D.2.10** D.2.8, the Permittee shall maintain the following:
  - (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:
    - (A) Inlet and outlet differential static pressure; and
    - (B) Cleaning cycle: frequency and differential pressure.
  - (2) Documentation of all response steps implemented, per event.
  - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.

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- (4) Quality Assurance/Quality Control (QA/QC) procedures.
- (5) Operator standard operating procedures (SOP).
- (6) Manufacturer's specifications or its equivalent.
- (7) Equipment "troubleshooting" contingency plan.
- (8) Documentation of the dates vents are redirected.
- (d) (c) To document compliance with Condition **D.2.11** <del>D.2.9</del>, the Permittee shall maintain records of the results of the inspections required under Condition **D.2.11** <del>D.2.9</del>.
- (e) (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

#### **D.2.14 Reporting Requirements**

A quarterly summary of the information to document compliance with Condition 2.4 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

# 9. Changes to Section D.3

Section D.3 has been changed to correct inconsistencies in stack and baghouse identifications, and to reflect the "as built" throughput and capacity of the facilities. These changes do not result in an increase in potential emissions. The conveying system is now controlled by baghouse MBH-2 and stack M-2, which has a stack specific emission limit in 326 IAC 6-1-10.1 (Nonattainment Area Particulate Limitations). Condition D.3.2 (b) has been added to enforce this limit. A landplaster storage bin, also controlled by stack M-2, was also added to this section.

The visible emissions monitoring frequency in Condition D.3.9 has been changed from daily to once per shift, and the pressure drop range in Condition D.3.10 has been changed to values specific for each baghouse.

The natural gas throughput limit for the six (6) natural gas fired burners for calcining kettle #2, which was contained in CP-089-8657-00333, issued on January 8, 1998, was left out of the Part 70 permit. This limit has also been added as Condition D.3.4, and has been changed from a monthly limit to a twelve (12) consecutive month period limit. The addition of the throughput limit also results in the addition of a quarterly reporting form at the end of the permit, and the addition of Condition D.3.14 for reporting requirements.

As a result of these new conditions, all subsequent D.3 sections have been renumbered.

The specific changes to Section D.3 are as follows:

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#### SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

A stucco production process, consisting of the following equipment:

- (a) One (1) kettle feed bin #2, with a maximum capacity of 60 tons, with particulate matter emissions controlled by one (1) baghouse, identified as **MBH-8** MBH-18, and exhausting through one (1) stack, identified as **M-8** M-18.
- (b) One (1) calcining kettle #2, with a maximum throughput of **45** <del>30</del> tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as **MBH-16** <del>MBH-11</del>, and exhausting through one (1) stack, identified as M-16.
- (c) Six (6) natural-gas fired burners for the calcining kettle #2, each with a heat input capacity of 5 MMBtu per hour, and exhausting through one (1) stack, identified as **M-14** M-15.
- (d) One (1) kettle feed bin #3, with a maximum capacity of 60 tons, with particulate matter emissions controlled by one (1) baghouse, identified as **MBH-8** MBH-13, and exhausting through one (1) stack, identified as **M-8** M-18.
- (e) One (1) calcining kettle #3, with a maximum throughput of 30 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-1, and exhausting through one (1) stack, identified as M-1.
- (f) One (1) natural-gas fired burner for the calcining kettle #3, with a heat input capacity of **15** 20 MMBtu per hour, and exhausting through one (1) stack, identified as M-6.
- (g) One (1) hot pit #3, with a maximum throughput of 30 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as **MBH-1** <del>MBH-3</del>, and exhausting through one (1) stack, identified as **M-1** <del>M-3</del>.
- (h) A conveying system, with a maximum throughput of **70** 30 tons per hour, with particulate matter emissions controlled by partial or total enclosure, and exhausting to associated processes or directly to the atmosphere. Some portions of the conveyor system are controlled by one (1) baghouse, identified as **MBH-2** MBH-13, and exhausting through one (1) stack, identified as **M-2** M-18.
- (i) One (1) stucco storage bin, with a maximum capacity of 50 tons, with particulate matter controlled by one (1) baghouse, identified as MBH-2, and exhausting through one (1) stack, identified as M-2.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.3.1 Nonattainment Area Particulate Limitation [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations), the PM emissions from the stucco production process shall be limited as follows:

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(a) PM emissions from kettle feed bins #2 and #3 exhausting to stack **M-8** M-18 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).

- (b) PM emissions from calcining kettle #2 exhausting to stack M-16 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (c) PM emissions from the natural gas-fired burners for kettle #2 exhausting to stack **M-14**M-15 shall not exceed 0.01 grains per dry standard cubic foot (gr/dscf).
- (d) PM emissions from the natural gas-fired burners for kettle #3 exhausting to stack M-6 shall not exceed 0.01 grains per dry standard cubic foot (gr/dscf).
- (e) PM emissions from hot pit #3 exhausting to stack M-1 M-3 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (f) PM emissions from the stucco storage bin exhausting to stack M-2 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).

# D.3.2 Lake County PM<sub>10</sub> Emission Requirements [326 IAC 6-1-10.1]

Pursuant to 326 IAC 6-1-10.1 (Lake County  $PM_{10}$  Emission Requirements), **the PM\_{10} emissions** shall be limited as follows:

- (a) The PM<sub>10</sub> emissions from kettle #3 exhausting to stack M-1 shall not exceed 0.012 grains per dry standard cubic foot and 3.210 pounds per hour.
- (b) The PM<sub>10</sub> emissions from stucco storage and conveying exhausting to stack M-2 shall not exceed 0.015 grains per dry standard cubic foot and 2.210 pounds per hour.

#### D.3.3 Emission Offset Minor PM Limit [326 IAC 2-3]

Pursuant to CP-089-8657-00333, issued on January 8, 1998, the PM emissions shall be limited as follows:

- (a) PM emissions from kettle #2 exhausting to stack M-16 shall not exceed 0.010 grains per dry standard cubic foot.
- (b) PM emissions from kettle feed bins #2 and #3 exhausting to stack **M-8** M-18 shall not exceed 0.008 grains per dry standard cubic foot.

Compliance with these limits make 326 IAC 2-3 (Emission Offset) not applicable. Compliance with these limits also will satisfy the requirements of 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations) for these facilities.

#### D.3.4 Emission Offset Minor NO<sub>x</sub> Limit [326 IAC 2-3]

Pursuant to CP-089-8657-00333, issued on January 8, 1998, natural gas throughput to the six (6) natural gas fired burners for calcining kettle #2 shall not exceed 338.4 million cubic feet per consecutive twelve (12) month period, including natural gas throughput to the wet and dry zone kiln natural gas burners, the wet and dry end seal natural gas burners, and the gauging water heater, of which are found in Section D.4.

Compliance with this limits will assure that the  $NO_x$  emissions from the facilities permitted under CP-089-8657-00333, issued on January 8, 1998 shall remain less than

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# twenty-five (25) tons per year and that the requirements of 326 IAC 2-3 are not applicable.

#### D.3.5 D.3.4 New Source Performance Standard [326 IAC 12] [40 CFR 60, Subpart UUU]

Pursuant to 40 CFR 60, Subpart UUU (Calciners and Dryers in Mineral Industries), PM emissions from the kettle #2 exhausting to stack M-16 shall not exceed 0.092 grams per dry standard cubic meter (g/dscm) and ten percent (10%) opacity.

#### **D.3.6** D.3.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

# **Compliance Determination Requirements**

#### **D.3.7** D.3.6 Testing Requirements [326 IAC 2-7-6(1),(6)]

- (a) Pursuant to CP 089-8657-00333, issued on January 8, 1998, the Permittee shall perform compliance testing for PM from kettle #2 exhausting to stack M-16 and kettle feed bins exhausting to stack M-8 M-18 within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up. The tests shall be performed in accordance with Section C Performance Testing and 40 CFR 60.736.
- (b) The Permittee is not required to test the remaining stucco production facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the limits specified in Conditions D.3.1, D.3.2, D.3.3 and **D.3.5** D.3.4 shall be determined by a performance test conducted in accordance with Section C Performance Testing.

# D.3.8 D.3.7 Particulate Matter (PM)

Pursuant to OP 45-07-93-0508, issued on December 19, 1989, and CP-089-8657-00333, issued on January 8, 1998, the baghouses for PM control shall be in operation at all times when the associated facilities are in operation.

# Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### **D.3.9** D.3.8 Visible Emissions Notations

- (a) Daily Visible emission notations of the stack exhausts M-1, M-2 M-3, —16 and M-8 M-18 shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

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# D.3.10 D.3.9 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the stucco production process, at least once daily when the associated facilities are in operation.

- (a) Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses MBH-1, MBH-2 and MBH-16 shall be maintained within the range of 0.5 2.0 and 6.0 inches of water, or a range established during the latest stack test.
- (b) Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse **MBH-8** shall be maintained within the range of 2.0 and **8.0** 6.0 inches of water, or a range established during the latest stack test.

The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

# D.3.11 D.3.10 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the stucco production process. All defective bags shall be replaced.

### **D.3.12** D.3.11 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

# D.3.13 D.3.12 Record Keeping Requirements

(a) To document compliance with Condition D.3.4, the Permittee shall maintain records of natural gas throughput to the six (6) natural gas fired burners for

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# calcining kettle #2.

(b) (a) To document compliance with Condition **D.3.9** D.3.8, the Permittee shall maintain records of daily visible emission notations of the stack exhausts M-1, M-2, M-3, M-16 and M-8 M-18 once per shift.

- (c) (b) To document compliance with Condition **D.3.10** D.3.8, the Permittee shall maintain the following:
  - (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:
    - (A) Inlet and outlet differential static pressure; and
    - (B) Cleaning cycle: frequency and differential pressure.
  - (2) Documentation of all response steps implemented, per event.
  - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
  - (4) Quality Assurance/Quality Control (QA/QC) procedures.
  - (5) Operator standard operating procedures (SOP).
  - (6) Manufacturer's specifications or its equivalent.
  - (7) Equipment "troubleshooting" contingency plan.
  - (8) Documentation of the dates vents are redirected.
- (d) (c) To document compliance with Condition **D.3.11** D.3.10, the Permittee shall maintain records of the results of the inspections required under Condition **D.3.11** D.3.10.
- (e) (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

### **D.3.14 Reporting Requirements**

A quarterly summary of the information to document compliance with Condition 3.4 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

# 10. Changes to Section D.4.

The equipment currently listed in Section D.4, an existing wallboard manufacturing line, is no longer in place. This equipment has been retired and the production line demolished. The following conditions have been removed from Section D.4:

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#### **SECTION D.4**

# **FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]

An existing gypsum wallboard manufacturing line, consisting of the following equipment:

- (a) An elevating and conveying system, with a maximum throughput of 30 tons per hour, with particulate matter emissions controlled by partial or total enclosure, and exhausting to associated processes or directly to the atmosphere. Some portions of the conveyor system are controlled by one (1) baghouse, identified as MBH-2, and exhausting through one (1) stack, identified as M-2.
- (b) One (1) stucco screen, with a maximum throughput of 32 tons per hour, with particulate matter controlled by one (1) bin vent, identified as MBH-9, and exhausting through one (1) stack, identified as M-9.
- (c) Two (2) stucco storage bins, with particulate matter emissions controlled by one (1) bin vent, identified as MBH-9, and exhausting through one (1) stack, identified as M-9.
- (d) One (1) paper fiber mill with cyclone separator, with a maximum throughput of 200 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-1, and exhausting through one (1) stack, identified as B-1.
- (e) Four (4) dry additive storage bins with hopper feeders, each with a maximum capacity of 5 tons, with all particulate matter emissions controlled by one (1) baghouse, identified as BB-1, and all exhausting to one (1) stack, identified as BB-1.
- (f) One (1) manually fed dry additive hopper feeder, with particulate matter emissions uncontrolled, and exhausting inside the building.
- (g) One (1) HRA mill additive bin with hopper feeder, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-7, and exhausting inside the building.
- (h) One (1) manually fed HRA mill hopper feeder, with particulate matter emissions uncontrolled, and exhausting inside the building.
- (i) One (1) HRA ball mill, with a maximum throughput of 1620 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-8, and exhausting inside the building.
- (j) One (1) dry mixing screw conveyor, with a maximum throughput of 60 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-1, and exhausting through one (1) stack, identified as B-1.
- (k) One (1) wet mixer, with a maximum throughput of 80 tons per hour, with particulate matter emissions uncontrolled, and exhausting inside the building.
- (I) Three (3) wallboard drying kiln burners, each with a heat input capacity of 22.7 million Btu per hour, with emissions uncontrolled, and exhausting in the kiln.
- (m) One (1) wallboard drying kiln, with a maximum throughput of 32,400 square feet of wallboard per hour, with emissions uncontrolled, and exhausting through three (3) stacks, identified as B-4, B-5 and B-6.

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### Facility Description [326 IAC 2-7-5(15)]

An existing gypsum wallboard manufacturing line, consisting of the following equipment (contd.):

(n) One (1) end saw, with a maximum throughput of 32,400 square feet of wallboard per hour, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-2, and exhausting through one (1) stack, identified as B-2.

# Emission Limitations and Standards [326 IAC 2-7-5(1)]

# D.4.1 Nonattainment Area Particulate Limitation [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations), the PM emissions from the existing wallboard production facilities shall be limited as follows:

- (a) PM emissions from the stucco bins and screens exhausting to stack M-9 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (b) PM emissions from the dry additive storage bins exhausting to stack BB-1 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (c) PM emissions from the drying kiln exhausting to stacks B-4, B-5 and B-6 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).

#### D.4.2 Lake County PM<sub>to</sub> Emission Requirements [326 IAC 6-1-10.1]

Pursuant to 326 IAC 6-1-10.1 (Lake County PM<sub>10</sub> Emission Requirements), the PM<sub>10</sub> emissions from the existing wallboard production facilities shall be limited as follows:

- (a) PM<sub>10</sub> emissions from the stucco elevating and conveying equipment exhausting to stack M-2 shall not exceed 0.015 grains per dry standard cubic foot and 2.210 pounds per hour.
- (b) PM<sub>10</sub> emissions from the paper grinding, additive system, and mixing screw exhausting to stack B-1 shall not exceed 0.020 grains per dry standard cubic foot and 2.230 pounds per hour.
- (c) PM<sub>10</sub>-emissions from the end saws exhausting to stack B-2 shall not exceed 0.020 grains per dry standard cubic foot and 0.860 pounds per hour.

#### D.4.3 PSD and Emission Offset Minor Limit [326 IAC 2-2] [40 CFR 52.21] [326 IAC 2-3]

Pursuant to CP 089-8657-00333, issued on January 8, 1998, the equipment listed in this section shall be removed from service prior to operation of the dryer mill #2 in Section D.2, the kettle #2 and hot pit #2 in Section D.3, or any of the equipment listed in Section D.5 of this permit.

Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration), 40 CFR 52.21, and 326 IAC 2-3 (Emission Offset) not applicable.

#### D 4.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

# **Compliance Determination Requirements**

#### D.4.5 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test these facilities by this permit. However, IDEM may require

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compliance testing at any specific time when necessary to determine if the facilities are in compliance.

If testing is required by IDEM, compliance with the PM and PM<sub>10</sub> limits specified in Conditions D.4.1 and D.4.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### D.4.6 Particulate Matter (PM)

Pursuant to OP 45-07-93-0511 and OP 45-07-93-0513, issued on December 19, 1989, the baghouses for PM control shall be in operation at all times when the associated facilities are in operation.

#### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

### D.4.7 Visible Emissions Notations

- (a) Daily visible emission notations of the stack exhausts M-2, M-9, B-1, B-2, B-4, B-5, B-6 and BB-1 shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

#### D.4.8 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the existing wallboard production process, at least once daily when the associated facilities are in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of 2.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

#### D.4.9 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the existing wallboard production process. All defective bags shall be replaced.

# D.4.10 Broken or Failed Bag Detection

In the event that bag failure has been observed.

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(a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated.

For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

#### Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

# **D.4.11 Record Keeping Requirements**

- (a) To document compliance with Condition D.4.7, the Permittee shall maintain records of daily visible emission notations of the stack exhausts M-2, M-9, B-1, B-2, B-4, B-5, B-6 and BB-1.
- (b) To document compliance with Condition D.4.8, the Permittee shall maintain the following:
  - (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:
    - (A) Inlet and outlet differential static pressure; and
    - (B) Cleaning cycle: frequency and differential pressure.
  - (2) Documentation of all response steps implemented, per event.
  - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
  - (4) Quality Assurance/Quality Control (QA/QC) procedures.
  - (5) Operator standard operating procedures (SOP).
  - (6) Manufacturer's specifications or its equivalent.
  - (7) Equipment "troubleshooting" contingency plan.
  - (8) Documentation of the dates vents are redirected.
- (c) To document compliance with Condition D.4.9, the Permittee shall maintain records of the results of the inspections required under Condition D.4.9.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

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# 11. Changes to Section D.5

There are several clarifications that have been made to the equipment list in Section D.5. Items c, d, j, k, and I are all storage and raw material bins. The capacities of these bins have been changed to reflect the "as built" configuration of these facilities. These changes have no effect on emissions.

Items p, q, r, and s are natural gas fired burners with small changes in the MMBtu heat input, which have also been made to reflect the "as built" configuration of these facilities. The wet end zone and dry end zone burners were permitted at 66 MMBtu each, but 67 MMBtu burners were installed. The wet end seal and dry end seal burners were permitted at 1.5 MMBtu each, but 2.5 MMBtu burners were installed. In the Affidavit of Construction submitted on April 28, 2000, the applicant incorrectly stated that all equipment was constructed in conformity with the requirements and intent of CP 089-8657-00333, issued on January 18, 1998. During this permit review, OAQ requested an explanation from the applicant regarding the discrepancy in the "as permitted" versus "as built" burners. In a letter dated October 1, 2001, the applicant stated that they were unable to come up with an explanation, and that for reasons unknown to them the larger burners were ordered and installed. The applicant further stated that they are currently in compliance with, and will continue to comply with the permitted emission limits for these burners, through natural gas throughput limitations.

These burners were subject to an emission offset analysis when originally permitted in CP-089-8657-00333, issued on January 8, 1998. Because these changes result in an increase of 4.0 MMBtu per hour, the 1998 emission offset analysis has been revised. The results of this reanalysis, shown in the following table, indicate that with inclusion of the additional 4.0 MMBtu of gas combustion, the units permitted under emission offset in 1998 are still below the emission offset significance levels.

Pollutant	<b>PM</b> (tons/yr)	PM <sub>10</sub> (tons/yr)	SO <sub>2</sub> (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NO <sub>x</sub> (tons/yr)
Proposed Modification	27.7	32.5	0.512	4.67	71.6	55.9
Contemporaneous Increases	0.00	0.00	0.00	0.00	0.00	0.00
Contemporaneous Decreases	26.1	28.2	0.193	1.08	14.5	36.6
Net Emissions	1.60	4.30	0.319	3.59	57.1	19.3
Offset Significant Level	25	15	40	25	100	25

The natural gas throughput limits for the wet zone kiln and dry zone kiln natural gas fired burners, and the gauging water heater, which were contained in CP-089-8657-00333, issued on January 8, 1998, were left out of the Part 70 permit. These limits have been added as Condition D.4.3, and have been changed from monthly limits to twelve (12) consecutive month period limits. The addition of the throughput limit also results in the addition of a quarterly reporting form at the end of the permit, and the addition of Condition D.4.14 for reporting requirements.

The other significant change to the operating conditions now listed in Section D.5 is the elimination of the stack testing requirement for the waste reclaim shredder, stack WR-1. The applicant has made a request to the OAQ to remove this requirement, stating that the effluent is exhausted inside

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the building, that special scaffolding would have to be built to conduct the test, and that due to the way the unit is constructed, testing would pose a safety hazard for the person conducting the test. OAQ has reviewed this request and determined that the testing requirement should be removed. Stack testing is still required for the end saw.

The visible emissions monitoring frequency in Condition D.5.7 (now D.4.8) has been changed from daily to once per shift, and the pressure drop range in Condition D.5.8 (now D.4.9) has been changed to between 0.5 and 6.0 inches of water.

In the current Part 70 permit and TSD, it is stated that the waste reclaim shredder was permitted under CP-089-8657-00333, issued on January 8, 1998. This unit was actually permitted under CP 089-7755-00333, issued on February 19, 1997.

The specific changes to Section D.5, which has been renamed as Section D.4, are as follows:

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#### SECTION D.4 D.5 FACILITY CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

A-new gypsum wallboard manufacturing line, consisting of the following equipment:

- (a) One (1) stucco storage bin, with a maximum capacity of 1200 tons, with particulate matter controlled by one (1) bin vent, identified as BBH-11, and exhausting through one (1) stack, identified as B-11.
- (b) One (1) stucco surge bin with hopper, with a maximum capacity of 2 tons, with particulate matter controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
- (c) One (1) **(HRA)** landplaster feed bin, with a maximum capacity of **20** 5 tons, with particulate matter emissions controlled by one (1) bin vent, identified as BBH-12, and exhausting through one (1) stack, identified as B-12.
- (d) One (1) HRA mill additive bin (sugar), with a maximum capacity of 10-6 cubic feet, feeding the HRA ball mill, with particulate matter emissions uncontrolled, controlled by one (1) bin vent, identified as MBH-19, and exhausting inside the building.
- (e) One (1) HRA ball mill, with a maximum throughput of 2400 pounds per hour, with particulate matter controlled by one (1) baghouse, identified as **BBH-18**, <del>BBH-14</del>, and exhausting through one (1) stack, identified as B-18.
- (f) One (1) HRA bin, with a maximum capacity of 3 tons, with particulate matter controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
- (g) One (1) additive refill bin (starch), with a maximum capacity of 3 tons, with particulate matter controlled by one (1) baghouse, identified as BBH-16, and exhausting through one (1) stack, identified as B-16.
- (h) One (1) additive refill receiver (vermiculite), controlled by one (1) vacuum receiver, identified as BVH-17, and exhausting through one (1) stack, identified as B-17.
- (i) Two (2) additive bulk storage bins (starch and vermiculite), each with a maximum capacity of 75 tons, with particulate matter emissions controlled by two (2) separate baghouses, identified as BBH-14 (starch) and BBH-15 (vermiculite), and all exhausting to two (2) respective stacks, identified as B-14 and B-15.
- (j) One (1) additive surge bin (vermiculite), with a maximum capacity of 5 tons, with particulate matter controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
- (g) Two (2) additive storage bin vacuum receivers, each with particulate matter emissions controlled by one (1) baghouse, identified as BVH-1 and BVH-2, and each exhausting to one (1) stack, identified as B-14 and B-15, respectively.
- (h) Two (2) additive refill vacuum receivers, each with particulate matter emissions controlled by one (1) baghouse, identified as BVH-3 and BVH-4, and each exhausting to one (1) stack, identified as B-16 and B-17, respectively.

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- (j) Two (2) additive surge storage bins, each with a maximum capacity of 5 tons, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-13, and all exhausting to one (1) stack, identified as B-13.
- (k) One (1) glass fiber additive bin, with a maximum capacity of **six (6) cubic feet** 0.5 ton, with particulate matter emissions uncontrolled, and exhausting inside the building.
- (I) One (1) paper fiber mill with cyclone separator, with a maximum throughput of **900** <del>200</del> pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
- (m) One (1) mixing screw conveyor, with a maximum throughput of 60 tons per hour, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
- (n) One (1) natural gas-fired gauging water heater, with a heat input capacity of 3.5 MMBtu per hour, and exhausting through one (1) stack, identified as B-19.
- (o) One (1) wet mixer, with particulate matter emissions controlled by one (1) baghouse, identified as BBH-13, and exhausting through one (1) stack, identified as B-13.
- (p) One (1) wet zone kiln natural gas-fired burner, with a heat input capacity of **67** 66 MMBtu per hour, and exhausting through one (1) stack, identified as B-20.
- (q) One (1) dry zone kiln natural gas-fired burner, with a heat input capacity of **67** 66 MMBtu per hour, and exhausting through one (1) stack, identified as **B-20** B-21.
- (r) One (1) wet end seal natural gas-fired burner, with a heat input capacity of **2.5** 1.5 MMBtu per hour, and exhausting through one (1) stack, identified as **B-20** B-21.
- (s) One (1) dry end seal natural gas-fired burner, with a heat input capacity of **2.5** 1.5 MMBtu per hour, and exhausting through one (1) stack, identified as **B-20** B-21.
- (t) One (1) wallboard drying kiln, with a maximum throughput of **78,000** 32,400 square feet of wallboard per hour, and exhausting through one (1) main stack, identified as **B-20** B24.—A portion of the exhaust is sent through a heat exchanger which exhausts through one (1) stack, identified as B27.
- (u) One (1) end saw, with a maximum throughput of **78,000** 32,400 square feet of wallboard per hour, with particulate matter emissions controlled by one (1) baghouse, identified as **BBH-25** BBH15, and exhausting through one (1) stack, identified as B-25.
- (v) One (1) waste reclaim shredder, with a maximum throughput of 50 tons per hour, with particulate matter controlled by one (1) baghouse, identified as WRBH-1, and exhausting through one (1) stack, identified as WR-1.
- (w) One (1) existing cut-back saw, with particulate matter controlled by one (1) baghouse, identified as BBH-25, and exhausting through one (1) stack, identified as B-25.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

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### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.4.1 D.5.1 Emission Offset Minor PM Limit [326 IAC 2-3]

Pursuant to CP-089-8657-00333, issued on January 8, 1998, the PM emissions shall be limited as follows:

- (a) PM emissions from the stucco storage bin exhausting to stack B-11 shall not exceed 0.008 grains per dry standard cubic foot.
- (b) PM emissions from the landplaster feed bin exhausting to stack B-12 shall not exceed 0.008 grains per dry standard cubic foot.
- (c) PM emissions from the HRA mill additive bin (sugar) exhausting inside the building shall not exceed 0.010 grains per dry standard cubic foot.
- (d) PM emissions from the HRA ball mill exhausting to stack B-18 shall not exceed 0.010 grains per dry standard cubic foot.
- (e) PM emissions from the dry additive system exhausting to stack B-13 shall not exceed 0.008 grains per dry standard cubic foot.
- (f) PM emissions from the additive storage bin vacuum receivers and additive refill vacuum receivers exhausting to stacks B-14, B-15, B-16 and B-17 shall not exceed 0.008 grains per dry standard cubic foot.
- (g) PM emissions from the end saws exhausting to stack B-25 shall not exceed 0.008 grains per dry standard cubic foot.

Compliance with these limits make 326 IAC 2-3 (Emission Offset) not applicable. Compliance with these limits will also satisfy the requirements of 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations) for these facilities.

# D.4.2 D.5.2 Nonattainment Area Particulate Limitation [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations), the PM emissions from the new gypsum wallboard line shall be limited as follows:

- (a) PM emissions from the stucco storage bin exhausting to stack B-11 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (b) PM emissions from the landplaster feed bin exhausting to stack B-12 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (c) PM emissions from the HRA mill additive bin (sugar) exhausting inside the building shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (d) PM emissions from the HRA ball mill exhausting to stack B-18 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (e) PM emissions from the dry additive system exhausting to stack B-13 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (f) PM emissions from the additive storage bin vacuum receivers and additive refill vacuum receivers exhausting to stacks B-14, B-15, B-16 and B-17 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).

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(g) PM emissions from the wallboard drying kiln exhausting to stack **B-20** B-24 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).

- (h) PM emissions from the natural gas-fired burners exhausting to stacks B-20, B-21, B-22 and B-23 shall not exceed 0.01 grains per dry standard cubic foot (gr/dscf).
- (i) PM emissions from the natural gas-fired gauging water heater exhausting to stack B-19 shall not exceed 0.01 grains per dry standard cubic foot (gr/dscf).
- (j) PM emissions from the end saws exhausting to stack B-25 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (k) PM emissions from the waste wallboard shredder exhausting to stack WR-1 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (I) PM emissions from the cut back saw exhausting to stack B-2 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).

## D.4.3 Emission Offset Minor NO<sub>x</sub> Limit [326 IAC 2-3]

Pursuant to CP-089-8657-00333, issued on January 8, 1998, natural gas throughput shall be limited as follows:

- (a) Natural gas throughput to the wet zone kiln and dry zone kiln natural gas burners, both exhausting to stack B-20, shall not exceed 1155.6 million cubic feet per consecutive twelve (12) month period.
- (b) Natural gas throughput to the gauging water heater exhausting to stack B-19, and the wet end seal and dry end seal natural gas burners, exhausting to stack B-20, shall not exceed 338.4 million cubic feet per consecutive twelve (12) month period, including natural gas throughput to the six (6) natural gas fired burners for calcining kettle # 2, found in Section D.2.

Compliance with these limits will assure that the  $NO_{\chi}$  emissions from the facilities permitted under CP-089-8657-00333, issued on January 8, 1998 shall remain less than twenty-five (25) tons per year and that the requirements of 326 IAC 2-3 are not applicable.

# D.4.4 D.5.3 New Source Performance Standard [326 IAC 12] [40 CFR 60, Subpart OOO]

Pursuant to 40 CFR 60, Subpart OOO (Nonmetallic Mineral Processing Plants), PM emissions from the waste wallboard shredder exhausting to stack WR-1 shall not exceed 0.05 grams per dry standard cubic meter (g/dscm) and seven percent (7%) opacity. Any fugitive emissions associated with these facilities shall not exceed ten percent (10%) opacity.

#### **D.4.5** D.5.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

#### **Compliance Determination Requirements**

#### **D.4.6** D.5.5 Testing Requirements [326 IAC 2-7-6(1),(6)]

(a) Pursuant to CP 089-8657-00333, issued on January 8, 1998, the Permittee shall perform compliance testing for PM from the stucco storage bin exhausting to stack B-11, the dry additive system exhausting to stack B-13, **and** the end saws exhausting to stack B-25, and the waste wallboard shredder exhausting to stack WR-1 within 60 days after

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achieving maximum production rate, but no later than 180 days after initial start-up. The tests shall be performed in accordance with Section C - Performance Testing and 40 CFR 60.675 (for the waste wallboard shredder).

(b) The Permittee is not required to test the remaining wallboard production facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facilities are in compliance. If testing is required by IDEM, compliance with the PM limits specified in Conditions **D.4.1**, **D.4.2** and **D.4.3** <del>D.5.1</del>, <del>D.5.2</del> and <del>D.5.3</del> shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### D.4.7 D.5.6 Particulate Matter (PM)

Pursuant to CP 089-7755-00333, issued on February 19, 1997, and CP 089-8657-000333, issued on January 8, 1998, the baghouses for PM control shall be in operation at all times when the associated facilities are in operation.

# Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

# D.4.8 D.5.7 Visible Emissions Notations

- (a) Daily Visible emission notations of the stack exhausts B-11 through B-18, B-25 and WR-1 shall be performed **once per shift** during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

### **D.4.9** D.5.8 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the new wallboard production process, at least once daily when the associated facilities are in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of **0.5** <del>2.0</del> 2.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

#### **D.4.10** D.5.9 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the new wallboard production process. All defective bags shall be replaced.

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### **D.4.11** D.5.10 Broken or Failed Bag Detection

In the event that bag failure has been observed.

(a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

#### D.4.12 D.5.11 Record Keeping Requirements

- (a) To document compliance with Condition D.4.3, the Permittee shall maintain records of natural gas throughput to the wet zone kiln and dry zone kiln natural gas burners, the gauging water heater, and the wet end seal and dry end seal natural gas burners.
- (b) (a) To document compliance with Condition D.4.8 D.5.7, the Permittee shall maintain records of daily visible emission notations of the stack exhausts B-11 through B-18, B-25 and WR-1 once per shift.
- (c) (b) To document compliance with Condition **D.4.9** D.5.8, the Permittee shall maintain the following:
  - (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:
    - (A) Inlet and outlet differential static pressure; and
    - (B) Cleaning cycle: frequency and differential pressure.
  - (2) Documentation of all response steps implemented, per event.
  - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
  - (4) Quality Assurance/Quality Control (QA/QC) procedures.
  - (5) Operator standard operating procedures (SOP).
  - (6) Manufacturer's specifications or its equivalent.
  - (7) Equipment "troubleshooting" contingency plan.

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(8) Documentation of the dates vents are redirected.

- (d) (c) To document compliance with Condition **D.4.10** <del>D.5.9</del>, the Permittee shall maintain records of the results of the inspections required under Condition **D.4.10** <del>D.5.9</del>.
- (e) (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

#### **D.4.13 Reporting Requirements**

A quarterly summary of the information to document compliance with Condition 4.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

# 12. Changes to Section D.6.

Several changes have been made to Section D.6 to correct inconsistencies in stack and baghouse identifications. The dry additive conveying system has also been added to the equipment list. These changes do not result in an increase in potential emissions.

The visible emissions monitoring frequency in Condition D.6.6 (now D.5.6) has been changed from daily to once per shift, and stacks J-11, J-12, J-13, J-14 and J-15 have been added to this condition. Stack J-14 has been added to Condition D.6.2 (now D.5.2), and the pressure drop range in Condition D.6.7 (now D.5.7) has been changed to between 0.5 and 6.0 inches of water.

Section D.6 has been renamed as Section D.5. The changed permit conditions are as follows:

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#### SECTION D.5 D.6 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

A joint treatment process, consisting of the following equipment:

- (a) A pneumatic conveying system from the bulk storage **silos** bins to the scale hoppers, with particulate matter emissions controlled by three (3) baghouses, identified as JBH-11, JBH-12 and JBH-13, and exhausting through three (3) stacks, identified as J-11, J-12 and J-13, respectively.
- (b) Four (4) scale hoppers, with particulate matter emissions uncontrolled, and exhausting inside the building.
- (c) A ready-mix line, consisting of the following equipment:
  - (1) Two (2) holding hoppers, each with a maximum throughput of 5 tons per hour, each with particulate matter emissions controlled by two (2) baghouses, one (1) baghouse, identified as JBH-1 and JBH-2, and each exhausting through two (2) stacks one (1) stack, identified as J-1 and J-2, respectively.
  - (2) One (1) dry additives bag dump, with a maximum throughput of 1176 pounds per hour, with particulate matter controlled by three (3) baghouses, identified as JBH-1, JBH-2 and JVH-3, and exhausting through three (3) stacks, identified as J-1, J-2 and J-3, respectively.
  - (3) Two (2) wet mixers, each with a maximum throughput of 7.25 tons per hour, and exhausting inside the building.
- (d) A dry joint compound line, consisting of the following equipment:
  - (1) One (1) dry additives bag dump, with a maximum throughput of 600 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JVH-8, and exhausting through one (1) stack, identified as J-8.
  - One (1) reclaim screw conveyor, with a maximum throughput of 1,184 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-7, and exhausting through one (1) stack, identified as J-7.
  - One (1) dry joint mixer, with a maximum throughput of 5,678 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-7, and exhausting through one (1) stack, identified as J-7.
  - (4) One (1) packing machine, with a maximum throughput of 5,100 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-14, and exhausting inside the building **through stack J-14**.
- (e) A dry texture paint line, consisting of the following equipment:
  - (1) One (1) dry additives bag dump, with a maximum throughput of 390 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as **JBH-5**JVH-6, and exhausting through one (1) stack, identified as **J-5** J-6.

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# Facility Description [326 IAC 2-7-5(15)]

# A joint treatment process, consisting of the following equipment (contd.):

- (2) One (1) reclaim screw conveyor, with maximum throughput of 502 pounds per hour, and a polystyrene screw conveyor, with a maximum capacity of 75 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-4, and exhausting through one (1) stack, identified as J-4.
- One (1) dry texture paint mixer, with a maximum throughput of 4650 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-4, and exhausting through one (1) stack, identified as J-4.
- (4) One (1) packing machine, with a maximum throughput of 4650 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-4, and exhausting through one (1) stack, identified as J-4.
- (5) One (1) dry paint weigh station, with particulate matter emissions controlled by one (1) baghouse, identified as JBH-15, and exhausting through one (1) stack, identified as J-15 JV-19: inside the building.
- (6) One (1) dry additive conveying system, with a maximum throughput of 400 pounds per hour, with particulate emissions controlled by one (1) vacuum receiver, identified as JVH-6, and exhausting through one (1) stack, identified as J-6.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

# Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### **D.5.1** D.6.1 Lake County PM<sub>10</sub> Emission Requirements [326 IAC 6-1-10.1]

Pursuant to 326 IAC 6-1-10.1 (Lake County  $PM_{10}$  Emission Requirements), the  $PM_{10}$  emissions from the dry treatment process facilities shall be limited as follows:

- (a) PM<sub>10</sub> emissions from the ready mix hoppers and bag dump exhausting to stacks J-1, J-2 and J-3 shall each not exceed 0.017 pounds per ton and 0.100 pounds per hour.
- (b) PM<sub>10</sub> emissions from the dry texture paint mixer and packing machine exhausting to stack J-4 shall not exceed 0.020 grains per dry standard cubic foot and 0.190 pounds per hour.
- (c) PM<sub>10</sub> emissions from the dry texture paint bag dump exhausting to stack J-5 shall not exceed 0.010 grains per dry standard cubic foot and 0.100 pounds per hour.
- (d) PM<sub>10</sub> emissions from the dry texture paint conveying exhausting to stack J-6 shall not exceed 0.010 grains per dry standard cubic foot and 0.030 pounds per hour.
- (e) PM<sub>10</sub> emissions from the dry joint mixing and conveying exhausting to stack J-7 shall not exceed 0.020 grains per dry standard cubic foot and 0.340 pounds per hour.
- (f) PM<sub>10</sub> emissions from the dry joint bag dump exhausting to stack J-8 shall not exceed 0.010 grains per dry standard cubic foot and 0.020 pounds per hour.

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### D.5.2 D.6.2 Nonattainment Area Particulate Limitation [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations), the PM emissions from **the packing machine exhausting to stack J-14 and** the dry paint weigh station exhausting to stack **J-15** JV-19 shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).

### D.5.3 D.6.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

# **D.5.4** Testing Requirements [326 IAC 2-7-6(1),(6)]

- (a) The Permittee shall perform compliance testing for PM<sub>10</sub> from the ready mix hopper #1 exhausting to stack J-1 within 12 months after issuance of this permit. The tests shall be performed in accordance with Section C Performance Testing.
- (b) The Permittee is not required to test the ready mix hopper #2 or bag dump, the dry texture paint mixing and packing, bag dump or conveying, or the dry joint mixing and packing or bag dump by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facilities are in compliance. If testing is required by IDEM, compliance with the PM and PM<sub>10</sub> limits specified in Conditions **D.5.1 and D.5.2** D.6.1 and D.6.2 shall be determined by a performance test conducted in accordance with Section C Performance Testing.

#### D.5.5 D.6.5 Particulate Matter (PM)

Pursuant to OP 45-07-93-0516, OP 45-07-93-0517 and OP 45-07-93-0518, issued on December 19, 1989, the baghouses for PM control shall be in operation at all times when the associated facilities are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

# D.5.6 D.6.6 Visible Emissions Notations

- (a) Daily Visible emission notations of the stack exhausts J-1, J-2, J-3, J-4, J-5, J-6, J-7, J-8, J-11, J-12, J-13, J-14 and J-15 shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

#### **D.5.7** Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the joint treatment processes, at least once weekly when the associated facilities are in operation. Unless operated under conditions for which the Compliance Response Plan

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specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of <del>2.0</del> **0.5** and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

# D.5.8 D.6.8 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the joint treatment processes. All defective bags shall be replaced.

### **D.5.9** Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

#### **D.5.10** D.6.10 Record Keeping Requirements

- (a) To document compliance with Condition **D.5.6** <del>D.6.6</del>, the Permittee shall maintain records of <del>daily</del> visible emission notations of the stack exhausts J-1, J-2, J-3, J-4, J-5, J-6, J-7, J-8, **J-11**, **J-12**, **J-13**, **J-14** and **J-15** once per shift.
- (b) To document compliance with Condition **D.5.7** D.6.7, the Permittee shall maintain the following:
  - (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:
    - (A) Inlet and outlet differential static pressure; and
    - (B) Cleaning cycle: frequency and differential pressure.
  - (2) Documentation of all response steps implemented, per event.
  - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.

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(4) Quality Assurance/Quality Control (QA/QC) procedures.

- (5) Operator standard operating procedures (SOP).
- (6)Manufacturer's specifications or its equivalent.
- (7) Equipment "troubleshooting" contingency plan.
- (8)Documentation of the dates vents are redirected.
- (c) To document compliance with Condition D.5.8 D.6.8, the Permittee shall maintain records of the results of the inspections required under Condition **D.5.8** D.6.8.

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All records shall be maintained in accordance with Section C - General Record Keeping (d) Requirements, of this permit.

#### 13. Changes to Section D.7.

The equipment currently listed in Section D.7, the Franklin Fiber process, is no longer in place. This equipment has been retired and the production line demolished. The following changes have been made to this section, eliminating all conditions.

#### SECTION D.7

#### **FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]

A Franklin Fiber process, consisting of the following equipment:

- Two (2) wet mixing tanks, with a combined maximum throughput of 1535 pounds per hour, with particulate matter emissions controlled by moisture content, and exhausting inside the building.
- One (1) reactor chamber using boiler steam, with particulate matter emissions controlled by moisture content, and exhausting inside the building.
- <del>(c)</del> One (1) filter using boiler heat to start drying process, with particulate matter emissions uncontrolled, and exhausting inside the building.
- One (1) lump breaker and natural gas-fired dryer, with a heat input capacity of 3 MMBtu per (<del>d)</del> hour and maximum throughput of 1535 pounds per hour, with particulate matter emissions controlled by two (2) baghouses, identified as MBH-6 and MBH-7, and exhausting through one (1) stack, identified as M-6.
- One (1) drop out box, with a maximum throughput of 8 pounds per hour, with particulate matter emissions controlled by one (1) baghouse, identified as MBH-6, and exhausting through one (1) stack, identified as M-6.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

# D.7.1 Lake County PM<sub>to</sub> Emission Requirements [326 IAC 6-1-10.1]

Pursuant to 326 IAC 6-1-10.1 (Lake County PM, Emission Requirements), the PM, emissions from the Franklin Fiber process exhausting to stack M-6 shall each not exceed 0.011grains per dry standard cubic foot and 0.313 pounds per hour.

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# D.7.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

# Compliance Determination Requirements

# D.7.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test the Franklin Fiber process by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facilities are in compliance. If testing is required by IDEM, compliance with the PM<sub>10</sub> limit specified in Condition D.7.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### D.7.4 Particulate Matter (PM)

Pursuant to OP 45-07-93-0512, issued on December 19, 1989, the baghouse for PM control shall be in operation at all times when the associated facilities are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.7.5 Visible Emissions Notations

- (a) Daily visible emission notations of the stack exhaust M-6 shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

# D.7.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the Franklin Fiber process, at least once weekly when the associated facilities are in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of 2.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

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### D.7.7 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the Franklin Fiber process. All defective bags shall be replaced.

#### D.7.8 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

# D.7.9 Record Keeping Requirements

- (a) To document compliance with Condition D.7.5, the Permittee shall maintain records of daily visible emission notations of the stack exhausts M-6.
- (b) To document compliance with Condition D.7.6, the Permittee shall maintain the following:
  - (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:
    - (A) Inlet and outlet differential static pressure; and
    - (B) Cleaning cycle: frequency and differential pressure.
  - (2) Documentation of all response steps implemented, per event.
  - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
  - (4) Quality Assurance/Quality Control (QA/QC) procedures.
  - (5) Operator standard operating procedures (SOP).
  - (6) Manufacturer's specifications or its equivalent.
  - (7) Equipment "troubleshooting" contingency plan.
  - (8) Documentation of the dates vents are redirected.
- (c) To document compliance with Condition D.7.7, the Permittee shall maintain records of the

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results of the inspections required under Condition D.7.7.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit

# 14. Changes to Section D.8.

Section D.8, Insignificant Activities, has been revised to reflect the removal from service of the two natural gas fired boilers. Section D.8 has been renamed as Section D.6. The revised permit conditions are as follows:

#### SECTION D.6 D.8. FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

The following insignificant activities:

- (a) One (1) natural gas-fired boiler, with a heat input capacity of 8.4 million Btu per hour, with emissions uncontrolled, and exhausting through one (1) stack, identified as M-3.
- (b) One (1) natural gas-fired boiler, with a heat input capacity of 3.4 million Btu per hour, with emissions uncontrolled, and exhausting through one (1) stack, identified as M-4.
- (a) (c) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- **(b)** (d) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (c) (e) One (1) landplaster baler, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.
- (d) (f) A polypropylene bag grinding process, consisting of the following equipment:
  - (1) A bag storage and conveying system, with two (2) bins and two (2) screw conveyors, with negligible emissions, and exhausting inside the building.
  - (2) Two (2) polypropylene bags grinding machines, each with a maximum throughput of 20 pounds per hour, with particulate matter emissions controlled by partial enclosure, and exhausted to the ground polypropylene bins.
  - (3) Three (3) ground polypropylene bins with screens, with a combined maximum capacity of 360 cubic feet, with particulate matter emissions uncontrolled, and exhausting inside the building.
  - (4) One (1) weigh feeder, with a maximum throughput of 47 pounds per hour, with particulate matter emissions uncontrolled, and exhausting inside the building.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

East Chicago, Indiana

Permit Reviewer: Pat Brennan/MES

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# Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### 8.1 Particulate Matter (PM) [326 IAC 6-2-2]

Pursuant to 326 IAC 6-2-2 (Particulate Matter Emission Limitations for Sources of Indirect Heating, the PM emissions from the boilers shall be limited as follows:

- (a) PM emissions from the 3.4 MMBtu per hour heat input boiler shall be limited to 0.6 pounds per MMBtu heat input.
- (b) PM emissions from the 8.4 MMBtu per hour heat input boiler shall be limited to 0.59 pounds per MMBtu heat input.

These limitations are based on the following equation:

# D.6.1 D.8.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a matter that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

#### D.6.2 D.8.3 Nonattainment Area Particulate Limitation [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations), the PM emissions from the welding equipment, landplaster baler, and polypropylene bag grinding process shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).

#### **Compliance Determination Requirements**

### **D.6.3** D.8.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facilities are in compliance. If testing is required by IDEM, compliance with the PM limits specified in Conditions **D.6.2** <del>D.8.3</del> shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

United States Gypsum Company East Chicago, Indiana

Permit Reviewer: Pat Brennan/MES

# **Forms**

The Certification form, the Emergency/Deviation Occurrence form, and the Semi-Annual Compliance Monitoring Report form have been changed to reflect the name change from the Office of Air Management to the Office of Air Quality, the change of the OAQ Compliance Data Section to the Compliance Branch, and the change in the plant address from 3501 Canal Street to 301 Riley Road.

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Three quarterly reporting forms were added to report natural gas throughput as required by new conditions in Sections D.2, D.3 and D.4. These forms are as follows:

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# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION**

# **Part 70 Quarterly Report**

Source Name:	United States Gypsum Corporation
Source Address:	301 Riley Road, East Chicago, Indiana 46312
Mailing Address:	301 Riley Road, East Chicago, Indiana 46312
Part 70 Permit No.:	T 089-7532-00333
Facility:	Dryer Mill # 2 (Condition D.2.4)
Parameter:	Natural Gas Throughput
Limit:	Less than 172.8 million cubic feet per consecutive twelve (12) month period

Month	Natural Gas Throughput (million cubic feet)			
	This Month	Previous 11 Months	12 Month Total	

9	No deviation occurred in this month.			
9	Deviation/s occurred in this month.			
	Deviation has been reported on:			
Submit	tted by:			
Title/Position:				
Signature:				
Date:				
Date.				
Phone				

Attach a signed certification to complete this report.

Date: Phone:

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# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION**

# **Part 70 Quarterly Report**

Source Name: Source Address: Mailing Address: Part 70 Permit No.: Facility: Parameter: Limit:	301 Riley Road, Eas T 089-7532-00333 Six (6) natural gas fi Gauging water heat Natural Gas Throug Less than 338.4 mill	st Chicago, Indiana 46312 st Chicago, Indiana 46312 fred boilers for calcining kettle er, wet end seal and dry end s hput lion cubic feet per consecutive	eal burners (Condition D.4.3)	
	YEAF	₹:		
Month	Natural Gas Throughput (million cubic feet)			
	This Month	Previous 11 Months	12 Month Total	
9	No deviation occurred in this month.			
9	Deviation/s occurred in this month.			
Deviation has been reported on:				
Subn	nitted by:			
Title/	Title/Position:			
Signature:				

Attach a signed certification to complete this report.

Date: Phone:

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# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION**

# **Part 70 Quarterly Report**

Source Name: Source Address: Mailing Address: Part 70 Permit No.: Facility: Parameter: Limit:	United States Gypsum Corporation 301 Riley Road, East Chicago, Indiana 46312 301 Riley Road, East Chicago, Indiana 46312 T 089-7532-00333 Wet Zone Kiln and Dry Zone Kiln Gas Burners (Condition D.4.3) Natural Gas Throughput Less than 1156.6 million cubic feet per consecutive twelve (12) month period			
	YEAI	R:		
Month Natural Gas Throughput (		utural Gas Throughput (million	million cubic feet)	
	This Month	Previous 11 Months	12 Month Total	
9	9 No deviation occurred in this month.			
9	Deviation/s occurred in this month.			
	Deviation has been reported on:			
Subm	Submitted by:			
Title/F	Title/Position:			
Signa	Signature:			

Attach a signed certification to complete this report.

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# Conclusion

The operation of this source shall be subject to the conditions of the attached proposed Part 70 Significant Permit Modification No. 089-11767-00333.

# **Determination Detail**

Control Number: 9800041

Category: NSPS

**EPA Office:** Region 4

**Date:** 04/03/1997

**Title:** Flue Gas Desulfurization Byproduct

**Recipient:** Gore, Ronald

**Author:** Neeley, R. Douglas

**Comments:** 

**Subparts:** Part 60, OOO Nonmetallic Mineral Processing

Part 60, UUU Calciners and Dryers in Mineral Ind.

# **Abstract:**

Q: Is a byproduct of flue gas desulfurization which has the same chemical composition as gypsum (CaSO4.2H2O) considered equivalent to gypsum and therefore regulated by Subparts OOO and UUU? The byproduct would be used in the manufacture of gypsum wallboard.

A: Yes. For purposes of regulation under Subparts OOO and UUU, the term "nonmetallic mineral" includes any substance which has the same chemical composition as a nonmetallic mineral specified in the regulations. Since the flue gas desulfurization byproduct has the same chemical composition as gypsum and will be processed in the same manner as naturally occurring gypsum, there is no justification for the exclusion of the byproduct from applicability under Subparts OOO and UUU.

# **Letter:**

April 3, 1997

#### 4APT-ARB

Mr. Ronald W. Gore Chief Air Division Alabama Dept. of Environmental Management 1751 Congressman W.L. Dickinson Dr. Montgomery, AL 36109-2608

SUBJ: New Source Performance Standards (NSPS), Subparts OOO and UUU

Dear Mr. Gore:

We have received your February 25, 1997, letter requesting an applicability determination regarding New Source Performance Standards (NSPS), Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants) and NSPS, Subpart UUU (Standards of Performance for Calciners and Dryers in Mineral Industries). In particular, your letter requests a determination regarding whether a byproduct of flue gas desulfurization which has the same chemical composition as gypsum (CaSO4ù2H2O) should be considered equivalent to gypsum and therefore regulated by Subparts OOO and UUU. Based on our review, we have determined that the byproduct of flue gas desulfurization as described to us would be considered gypsum for purposes of regulation under Subparts OOO and UUU.

As described in your letter, a gypsum board manufacturing facility owned by U.S. Gypsum Company will use as raw material a byproduct of flue gas desulfurization from a nearby electric utility plant. Even though the byproduct has the same chemical composition as gypsum, U.S. Gypsum claims that it is not gypsum since it is not mined and is not a mineral.

The Subpart OOO and UUU regulations identify gypsum as a nonmetallic mineral, and the processing of gypsum in affected facilities is therefore covered by these regulations. Although the term "nonmetallic mineral" typically relates to naturally occurring substances, for purposes of regulation under Subparts OOO and UUU the term nonmetallic mineral also includes any substance which has the same chemical composition as a nonmetallic mineral specified in the regulations and which is processed in a manner similar to that used for the naturally occurring substance. Since the flue gas desulfurization byproduct has the same chemical composition as gypsum and will presumably be processed in the same manner as naturally occurring gypsum in the manufacture of gypsum board, there is no justification for the exclusion of the byproduct from applicability under Subparts OOO and UUU. Any process operations which are designated as "affected facilities" in Subparts OOO and UUU and which are used to process gypsum or a substance with the same chemical composition will be subject to the requirements of those regulations. The intent of the Subpart OOO and UUU regulations is to control emissions from the processing of certain types of materials in the operations which are identified as affected facilities. The actual source of those materials has no relevance with regard to the emissions from the affected facilities.

If there are any questions regarding the contents of this letter, please contact Keith Goff of my staff at (404)562-9137.

Sincerely yours,

R. Douglas Neeley Chief Air and Radiation Technology Branch Air, Pesticides, and Toxics Management Division

# **Determination Detail**

Control Number: 9800042

Category: NSPS

**EPA Office:** Region 4

**Date:** 05/22/1997

**Title:** Gypsum Wallboard Recycling

**Recipient:** Methier, Ron

**Author:** Neeley, R. Douglas

**Comments:** 

**Subparts:** Part 60, OOO Nonmetallic Mineral Processing

**References:** 60.671

# **Abstract:**

Q: Is the recycling of waste gypsum-containing material subject to Subpart OOO?

A: Yes. The term "nonmetallic mineral" is defined in Subpart OOO as any of the minerals specified in the regulation or any mixture of which the majority is any of the specified minerals. Since the majority of the content of gypsum wallboard is gypsum, wallboard is considered equivalent to gypsum. Any recycling operations which involve the crushing or grinding of gypsum wallboard are subject to Subpart OOO.

# Letter:

May 22, 1997

4APT-ARB

Mr. Ron Methier, Chief Air Protection Branch Environmental Protection Division Georgia Department of Natural Resources 4244 International Parkway Suite 120 Atlanta, GA 30354

SUBJ: New Source Performance Standards (NSPS), Subpart OOO

Dear Mr. Methier:

We have received the attached letter dated April 30, 1997, from Georgia-Pacific Corporation concerning the applicability of New Source Performance Standards (NSPS), Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants. The letter references a June 3, 1996, determination which we provided to your office, at the request of Georgia-Pacific, regarding the applicability of the regulation to operations involved in the recycling of waste gypsum wallboard. In that determination, we stated that there is no exemption in Subpart OOO for grinding equipment which is used in nonmetallic mineral "recycling" operations. Below is further discussion and clarification regarding the determination provided in our June 3, 1996, letter. The determination provided in that letter remains unchanged.

The portion of our June 3, 1996, letter on which Georgia-Pacific has requested clarification is provided below. As explained in Georgia-Pacific's April 30, 1997, letter, the recycling of gypsum-containing material would include the recycling of off-specification stucco, plaster, or landplaster.

"There is no provision in Subpart OOO that exempts grinding or crushing equipment used in nonmetallic mineral recycling operations. Although EPA has previously determined that glass and brick recycling operations are not subject to Subpart OOO, the basis for these determinations was the fact that bricks and glass are not nonmetallic minerals, rather than the fact that the processes involved recycling. Since gypsum is one of the nonmetallic minerals listed in the definitions in 60.671, equipment in a recycling process that includes the crushing or grinding of gypsum would be subject to Subpart OOO."

In Subpart OOO, a listing of minerals is provided in the definition of "nonmetallic mineral," and the term is defined as any of the specified minerals or any mixture of which the majority is any of the specified minerals. Therefore, it is not necessary that a material consists solely of one or more of the specified minerals to be regulated as a "nonmetallic mineral" under Subpart OOO. Since the majority of the content of gypsum wallboard is gypsum (CaSO4ù2H2O), wallboard is considered to be equivalent to gypsum, a nonmetallic mineral, under Subpart OOO. Any recycling operations which involve the crushing or grinding of gypsum wallboard would be subject to Subpart OOO. (Crushing or grinding of a nonmetallic mineral must occur for Subpart OOO to be applicable to the other affected facilities specified in the regulation at \_60.670.) The previous determination provided by our office did not intend to differentiate gypsum from wallboard which is manufactured from gypsum, as suggested in Georgia-Pacific's April 30, 1997, letter.

As stated in the development document for the Subpart OOO regulation, "Nonmetallic Mineral Processing Plants - Background Information for Proposed Standards," April 1983, (EPA-450/3-83-001a), materials such as calcined gypsum, plaster of paris, and articles molded from plaster,

are considered "gypsum." Based on this statement, affected facilities associated with the processing or recycling of products made from gypsum, or any other nonmetallic mineral, are not outside the scope of regulation of Subpart OOO. The processing of substances such as stucco, plaster, or landplaster, which are mentioned in Georgia-Pacific's letter, would be subject to Subpart OOO if grinding or crushing operations are used.

Although glass and brick are manufactured from nonmetallic minerals (sand and clay, respectively), they are not considered chemically equivalent to any of the nonmetallic minerals specified in Subpart OOO. Since the manufacture of glass and brick involves the blending and further processing of various raw materials, which includes fusion by heating, the final product is not considered chemically equivalent to any of the nonmetallic minerals covered by the regulation. Recycling operations which involve the crushing or grinding of brick or glass would not therefore be subject to Subpart OOO. The nonapplicability of Subpart OOO to the recycling of glass and brick is based on the fact that the materials are not considered nonmetallic minerals, rather than the fact that "recycling" is involved. Other types of recycling operations, such as the crushing of concrete and asphalt paving for reuse, have previously been determined to be subject to Subpart OOO. (See enclosed determinations downloaded from the U.S. Environmental Protection Agency Technology Transfer Network Bulletin Board.) Concrete and asphalt pavement are generally composed mostly of nonmetallic minerals (i.e., sand, gravel, crushed stone), and are therefore considered equivalent to nonmetallic minerals.

If there are any questions regarding the contents of this letter, please contact Keith Goff of my staff at (404)562-9137.

Sincerely yours,

R. Douglas Neeley Chief Air and Radiation Technology Branch Air, Pesticides, and Toxics Management Division

**Enclosures** 

cc: Scott D. Rois Environmental Manager Georgia-Pacific Corporation